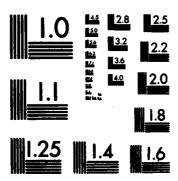
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NAVAL POSTGRADUATE SCHOOL Monterey, California





THESIS

QUANTITATIVE AND QUALITATIVE EFFECTIVENESS DIMENSIONS OF THE U.S. COAST GUARD RECRUITING PROGRAM

By

Harvey E. Johnson

June 1983

Thesis Advisor:

T.G. Swenson

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The United States Coast Guard's increasing employment of advanced technology aboard its cutters, aircraft and shore commands has introduced an evolving demand for the consideration of a quality dimension in manpower planning. During recent years, this demand for quality personnel has outdistanced input. Recognizing the requirement for a long

term organizational change effort to reverse this trend, this thesis identifies the recruiting program as the most effective agent for that change.

In order to determine the recruiting program's current level of effectiveness, the program's objectives were compared to its FY-82 performance. Additionally, a recruiting effectiveness model was developed from a review of current literature. While a significant level of quantitative effectiveness was noted within current organizational limits, that level was reduced as considerations were made for the qualitative dimension and recruit attrition. The reduction in effectiveness was largely attributable to the lack of clearly stated qualitative objectives and the absence of quality measures from the performance evaluation and control processes.

Significant improvement in the level of qualitative effectiveness requires the explicit inclusion of the qualitative dimension within the program's strategic decision making process. The qualitative objectives can be defined more clearly and operationalized through the development of appropriate perfromance measures, implemented in recognition of each district's inherent quality and quantity potential.

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Quantitative and Qualitative Effectiveness Dimensions of the U. S. Coast Guard Recruiting Program

by

Harvey E. Johnson
Lieutenant, United States Coast Guard
B.S., United States Coast Guard Academy, 1975

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

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I. INTRODUCTION

"To meet the Navy's expanding manpower needs only in numbers is not enough; manning a growing naval force has a qualitative dimension as well." [Ref. 1].

Appearing in the Secretary of Defense's Manpower Requirements Report (DMRR) to the Congress for FY-83, this statement's message is no less applicable to the U. S. Coast Guard.

A. , PURPOSE

Recognizing that earlier this year the Coast Guard's level of awareness was elevated with regard to deficiencies in the basic skill and knowledge requirements, by the purpose of this thesis is to identify the recruiting program, from among the many alternatives, as having the greatest potential for effectively evaluating and controlling the quality dimension. This thesis will explore the concept of recruiting effectiveness as it can be defined in terms of quantity AND quality within the Coast Guard recruiting program. The Coast Guard recruiting program has generated considerable expertise and efficiency at operating within the quantity dimension. Therefore, this thesis will focus attention upon the quality dimension as it relates to, and can be manipulated by, the recruiting organization. 'specific elements of the recruiting program having potential to impact effectiveness through quality will be identified ->crici

^{- 10.5.} Ccast rand, Jamandant's Briefing "A" School Cut Scores, 13 September 1/2.

cont

and evaluated in light of current research. Recommendations concerning those elements and their usefulness in the evaluation and control of the quality and quantity dimensions will be offered with the intention of improving the Coast Guard's responsiveness to evolving quality demands.

B. BACKGROUND

As late as 1975, the Coast Guard enjoyed a reputation for attracting recruits of superior quality to those enlisting in either of the Department of Defense (DOD) services. Ferhaps because this relative position had existed for many years, a general perception evolved that the Coast Guard could routinely attract sufficient quality with no more than the normal effort required to attract the necessary quantity of recruits. Quality was presumed to be no major problem. While no doubt this perception may still exist within some elements of the organization, a review of recent and related trends suggest these expectations of assumed quality are ill founded. There appears to be some imbalance between the current personnel inputs and the desired level of quality as greater emphasis has been placed upon quantity.

Prior to 1975 the Coast Guard consistently recruited greater percentages of Mental Category I and II and lesser percentages of Category IV and V individuals than any of the others services. Since that time however, the relative position has declined such that in FY-1982, the Coast Guard compared favorably only to the Marine Corps and the Army. Initially the relative decline seemed to be simply a function of the misnorming of the ASVAB. However, as illustrated in Figure 1.1 and Figure 1.2, the relative decline remains apparent in the most recent data for FY-82.2

^{*}The Department of Defense data for 2Y-81 and prior can

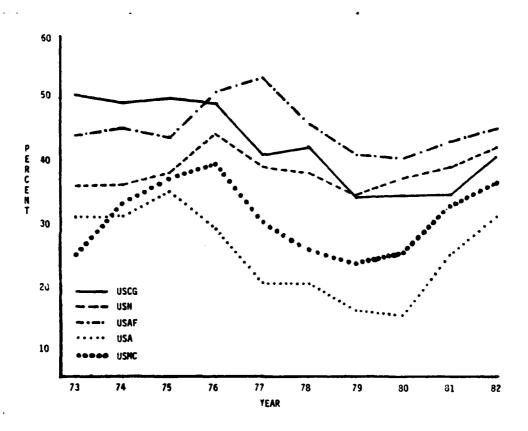


Figure 1.1 Mental Category I and II By Service

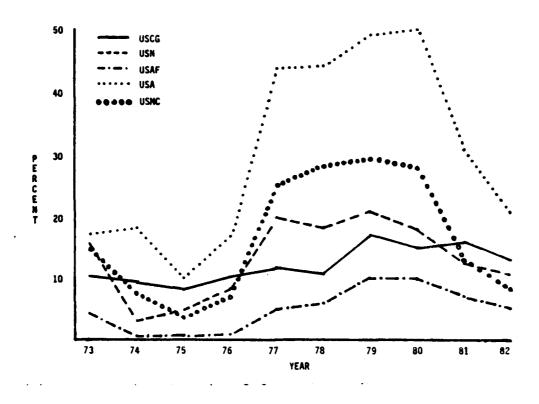


Figure 1.2 Mental Category IV and V By Service

While mental category does not stand alone as the single characteristic or predictor of quality, the various categories (I thru V) have proven to be valid predictors of Class "A" school performance which in turn serves as a valid predictor for jcb performance.3

During recent years the short term performance of recruits in basic training has followed a similarly unsettling pattern. The recruit training attrition rate* has increased from 12% in 1978 to approximately 19% in FY-82. By comparison, Navy recruit training attrition was 8.3% for FY-82, and averaged just 8% over the past three years. Beyond recruit training, attrition at the Class "A" schools has also reached larger proportions, averaging more than 13% system wide in FY-82, far exceeding the 7% rate experienced by the Navy during the same time period. At one technical "A" school, more than 40% of the students were rephased, or or extended in training, at least once during the training period [Ref. 2]. This level of attrition and rephasing carry considerable implications for the costs of recruit and specialized skill training.

This relative decline in the attraction of quality recruits into the Coast Guard could not have arrived during a less desireable period. During recent years, the Coast Guard has begun positive movement into the technological age. Whether aboard the 270' WMEC's, the HH-65A helicopters or the HU-25 Falcon jets, the term 'skilled personnel' has begun to take on new meaning. This trend is further

CHARGE TOURSENS SECTIONS. SECTION.

be found in Reference (7): FY-82 was provided by the Defense Manpower Data Center (DMDC) : and the Coast Guard data is provided by the Office of Personnel.

^{30.}S. Ccast Guard, Commandant's Briefing "A" School Cut Scores, September 13,1982.

^{*}Those recruits discharged prior to the completion of recruit training.

SU.S. Navy, Memorandum Subject: Navy Recruiting Data, 7 February 1983.

evidenced by the evolution of advanced management information and decision support systems such as the Personnel Management Information System (PMIS) and the Joint Uniformed Military Pay System (JUMPS), as well as progress with the C-3 computer network installation. Considering the advanced skill requirements that accompany each of these innovations, the personnel demands being placed on the Coast Guard are unlike those experienced at any time in our history. Although new to the Coast Guard, these quality demands are simultaneously being placed upon the other military services as well.

The nature of these trends and their serious implications on current and and future operational performance have not gone unnoticed by the Commandant. Earlier in this fiscal year, in direct attempts to impact the quality dimension in manpower planning, the Coast Guard took four significant action steps:

- a scholastic requirement was established as an enlistment standard: high school graduate or high school GED
- the mental standards for enlistment were raised to match the minimum 'A' school standards
- the 'A' school mental battery qualifying scores were raised for sixteen of twenty-three schools
- the development of an Education Enrichment Program (EEP) was authorized for use at Coast Guard training centers in order to elevate the reading and math skills to acceptable levels.

Clearly the demand for personnel is becoming more than a demand for numbers. The quality dimension in manpower planning is receiving increased attention. The Commandant has recognized the significance of improving the quality dimension and meeting the challenges of technological growth. Yet as important as these initial steps are, they must be viewed

within the context of other alternatives. The raising and lowering of qualification scores is not a unique occurance.

• Having been used before and given some combination of critical conditions, i.e. low unemployment coupled with high personnel needs, the temptation for their lowering may occur at some time in the future. Additionally, as initially approved, the need for the education enrichment program is expected to decline in future years [Ref. 2]. In a sense then, these initial steps represent reasonable band-aid solutions for a series of serious problems. The void of a long term organizational strategy for change remains present. How can the organization sufficiently adjust itself so that quality and quantity demands are routinely recognized within the planning process and operationally achieved?

C. OBJECTIVES AND SCOPE

In developing this long term strategy, two primary alternatives seem open for consideration. In the first, a transformation strategy, recognition of the problem is accompanied by a desire to minimize and cope with its consequences. In addition to the Education Enrichment Program (EEP), there are many other alternative actions open to the Coast Guard that would provide methods of coping with an influx of minimally qualified individuals. The Coast Guard might adopt and pursue any one, or combination, of the alternatives appearing in Table I.

These are but a few of the options available for impacting the quality dimension given that the individuals are introduced within the system. Within this strategy the assumptions are: 1) we are attracting the best of the

^{*}U.S. Coast Guard, Commandant's Briefing "A" School Cut Scores, September 13, 1982.

TABLE I Options for Impacting Quality

- Require that additional forms of basic skill training to be accomplished prior to selection for specialized skill schools, i.e. additional correspondence courses.
- Lengthen the curriculum of "A" schools, maintaining the current performance criterions but covering material at a more basic level.
- Rewrite the curriculum for "A" schools recognizing the current entrance knowledge lavels.
- Initiate a service-wide task redssign adopting simplification as a standard operating principle.
- Provide additional funding and support for the off-duty education program.
- Davelop incentive systems that promote the advantages of a continuing education program, i.e. attendance at schools on Coast Guard time.
- Encourage the development and use of skill building courses administered at the level of the operational units.
- Conduct periodic reductions in force to seperate the unqualified from the service.
- Authorize Enlisted Screening Panels which would provide additional personnel reviews prior to authorization for re-enlistment.
- Adopt milestones to success that would identify specific personal quality improvement actions required by certain time-in-service dates in order to remain on active duty.
- Create a "mentor" program by promoting and publicly recognizing those of superior quality as examples for others to follow.

quality that is available, and 2) current deficiencies in quality are something over which the Coast Guard exercises little or no control, i.e. the high schools aren't what they used to be. While each of these actions offers potential for a measured impact on the quality dimension, they recognize and accept existing quality deficiencies as a given.

The second alternative, an input/control strategy, recognises the problem and aspires to hip it in the bud: impact the quality dimension directly at the input source. This strategy assumes: 1) the Coast Guard can identify its manpower needs in qualitative and quantitative terms, and 2) these needs can be effectively operationalized at the input source sc as to facilitate optimal selection.

The recruiting program seems best suited for pursuing this input/control strategy. As the organizational arm responsible for the selection and enlistment of the manpower resources, it occupies a unique position affording the potential to be the most effective agent in addressing both the quantity and quality demands.

When viewing each of the primary alternatives, as well as the many appearing in Table I, each shares an inherent cost differential in addition to variations in the potential impact upon recruiting effectiveness. Some of the alternatives require considerable budgetary, personnel and time investments while others can essentially be incorporated into existing programs and policies. In any case, these costs will not be addressed as issues in this thesis as the primary focus will be the policy and procedural issues affecting recruiting effectiveness.

In terms of the quantitative aspect of this alternative, the Coast Guard has established planning procedures for determining its manpower requirements. Additionally, information systems are in place which provide some evaluation and control capability insuring that the manpower strength

is maintained at the desired level. At the input source, the Coast Guard has consistently exhibited skill and success at meeting enlistment quotas through the recruiting program. Over the past eight years, the recruiting program has averaged an achievement of more than one-hundred per-cent of its assigned quota. As an additional indicator of success, in September 1982, Captain Stevens Smith, the division chief responsible for the recruiting program, was presented with the Award for Achievement in Equal Opportunity by the Secretary of Fransportation Transportation.7

With the qualitative aspect however, a similar level of planning and achieving success has been scmewhat elusive. Perhaps due to the lack of a singular or universal definition or understanding of the term "Quality dimension", there are no specific quality goals of achievement for any level above that of the minimum enlistment standards. In the absence of explicit organizational quality goals, there has been little activity to design measures of input quality. In short, other than to insure that minimal standards are attained, the Coast Guard has no other mechanism to identify, obtain or evaluate the quality dimension at the point of input. Accordingly, the objective of this thesis is to pursue the second alternative, identifying those aspects of the recruiting program possessing the potential to impact the quality dimension, focusing on the specific aspect of monitoring and controlling quality.

Commandant's Bulletin, v.23-82, p.9, 11 October 1982.

The standards as defined by the Recruiting Manual (CONDINST M1100.2).

D. QUALITY DINERSION

of generating as much controversy as does the concept of "quality". Since the introduction of the All Volunter Force (AVF) in 1973, the concept and its implications have been used to the advantage and the disadvantage of the Department of Defense. The desire for quality was viewed with such importance by Congress that specific goals and constraints were legislated for the Army. [Ref. 1]. Although not yet a specific concern to external agencies exercising control over the Coast Guard, internal interest in quality has recently been heightened.

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Of general concern and desire in every organization, the term quality seems to be one of those broad intangibles that is difficult to define explicitly, more difficult to measure and extremely difficult to predict accurately. When applied to an individual or to that individual's performance, it becomes the product of innumerable traits that prove difficult to evaluate in a cumulative sense. Ability, aptitude and attitude are but a few of the quality traits. identified these traits, the individual's contribution within a team, toward a project or operational goal is still subject to a great many situational factors. As great as is the desire for a measure of quality, there are barriers which prevent its exact measurement. Having identified many of the desirable traits, measuring them becomes fraught with difficulties as recruiters are limited in their abilities to gather evaluative information in order to conduct comprehensive applicant screenings. While research indicates that access to arrest records, school expulsions and family stability could reduce attrition by nearly four percent

^{*}U.S. Coast Guard, Commandant's Briefing "A" School Cut Scores, September 13,1982.

[Ref. 3], this information is frequently unavailable due to various state and local statutes.10

All is not lost however, as there are two aspects of quality that can be measured; education attainment and mental ability. To some degree, each of these individual measures serves as a composite for many of the previously mentioned single traits.

1. <u>Fducation Attainment</u>

Evaluating the highest level of education attained serves as an indicator of an individual's aptitude, attitude and ability. Additionally, considerable research has repeatedly supported the link between education level and the successful accomplishment of subsequent training. In a 1981 study by the Center for Naval Analysis, it was concluded that education level had the greatest impact on survival of a recruit through the first eight years of service [Ref. 4]. Recent Coast Guard data tends to support that conclusion as shown in Table II.

TABLE II
HSG vs. Non-HSG Completion Rates

Completing Recruit Training FY-82

	Graduated	Discharged
HSG	82.5%	17.5%
Ncn HSG	69.0%	31.0%
Overall Average	81.2%	18.8%

¹⁰Host notable difficulty is encountered in California.

2. Mental Aptitude

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In the military context, mental aptitude is defined as the potential to benefit from training, in other words, a measure of trainability. Tests for mental aptitude are NOT intelligence tests. Until February 1983, the Coast Guard derived these measures from the administration of the Coast Guard test battery during the fourth week of recruit training. Since that time, the Coast Guard has joined the cther services in the use of the Armed Services Vocational Aptitude Battery (ASVAB) which is administered prior to an individual's enlistment. The test battery consists of a number of individual tests that seek to determine levels of verbal, arithmatic, mechanical, clerical and electronic skills. The composite derived from selected tests are then combined with certain physical, medical and educational standards to determine an individual's eligibility for enlistment into the armed forces.

For quality determination purposes, the arithmetic and verbal scores have traditionally been combined and grouped into the five distinct percentile categories identified in Table III.

TABLE III

Mental Category by Percentile

Mental Category	Percentile
I & II	65 - 99
III A	50 - 64
III E	31 - 49
IV & V	0 - 30

Persons who score in Category I or II are considered above average in trainability; those in Category III, average; those in Category IV, below average: and those in Category V, well below average. (For comparative purposes, realing ability for those in Category III equates to the eighth grade level.) The military services have traditionally identified those in Categories I, II and the upper half of III to be the most desireable applicants. Members of these groups generally qualify for a wider range of specialized skill training schools and experience less attrition, thereby reducing training costs in terms of time and dollars. Additionally, as in the educational level attained, persons in the higher mental categories have exhibited greater probabilities of completing recruit training than dc those in the lower categories [Ref. 5]. Recent Coast Guard data tend to support this conclusion as shown in Table IV.

TABLE IV
Recruit Training Success By Category

Completing Recruit Training FY-82

	Graduated	Discharged
Category I & II	97.9%	2.1%
Category IIIA	96.3%	3. 2%
Category IIIB	93.1%	6.9%
Category IV & V	85.9%	14.1%

3. Summary

Although the strength of the relationship between the two measures and quality are frequently discussed and bear some interpretational limitations, substantial research has indicated that both education attainment and mental ability are valid predictors of future success in training [Ref. 1 p. VIII-1.]. These two factors then are represented by the term "quality dimension". The degree to which the Coast Guard incorporates these measures in its goal setting processes and the degree to which these measures are characteristic of the recruiting program's output indicate the level of success achieved with the quality dimension.

E. RECRUITING EFFECTIVENESS

In avaluating the performance of an organization, two criteria commonly utilized are efficiency and effectiveness. In the former, organizational outputs are compared to its inputs, whereas in the latter, outputs are compared with the organizational objectives. Organizations generally strive for both efficiency and effectiveness recognizing that one may moderate the other. Considering that resource inputs desisions are bureaucratically beyond the control of the recruiting organization, and being primarily concerned with achievement of qualitative and quantitative objectives, this thesis will focus upon recruiting effectiveness.

1. Measures

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As was the case with the term "quality dimension", recruiting effectiveness is another abstract term that is difficult to define. There is no absolute value of effectiveness. Operationalizing the term, we generally speak of its measures, measures which relate output to the objectives. A recruiting program may be considered effective to

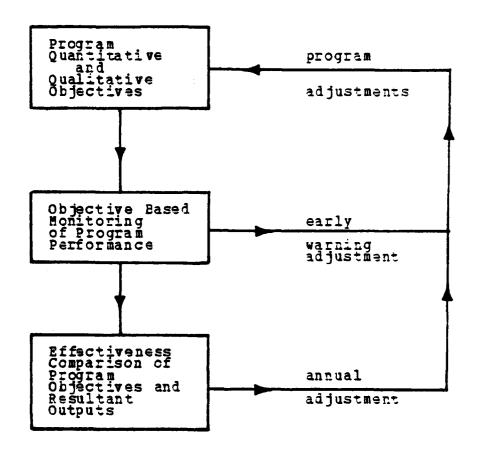
the degree that it attains its overall goal; the minority goal; the non-prior service goal; the prior service goal; the high school diploma graduate goal; the female goal; or any combination thereof. In the normal usage of the term then, in order for a recruiting program to achieve a degree of effectiveness it must first develop a comprehensive set of objectives which, collectively, will define its purpose.

The second requirement is that the program design an appropriate control system that will provide meaningful and comprehensive performance measures affording the comparison of program outputs to program objectives. In order for the Coast Guard's recruiting program to achieve the desired level of effectiveness with the qualitative and quantitative dimensions then, it would first be required to have clearly stated objectives with regard to both dimensions; and secondly, a control system offering the capability to compare the quantity and quality of its recruits to the program objectives. Having this capability in place, effectiveness measures can be obtained in continuous short term periods, creating an early warning and control system identifying the need for adjustments that enable achievement of long term objectives. This effectiveness cycle is illustrated in Table V.

2. Effectiveness Elements

As important as is the measurement of effectiveness, one is eventually confronted with the question of how to control it. To this end, it is necessary to identify the program elements that have a potential to impact effectiveness and to understand their interrelationships. Clearly there is no simple path, no single button to push in achieving a desired level of recruiting program effectiveness as there must be cooperation and coordination of numerous elements. These elements are identifiable however,

TABLE V
Recruiting Effectiveness Cycle



each independently and collectively having the potential to affect the level of effectiveness attained in responding to objectives. Five such elements and their interactions are considered to be particularly critical and will be specifically addressed: 1) territorial potential, 2) the number of recruiters, 3) individual recruiter characteristics, 4) recruiting source characteristics, and 5) management policies (i.e. goal setting, quota determination and assignment, incentive and reward system).

F. METHCDOLOGY

In order to provide an overview of the total enlisted recruiting program as it relates to the development of the input strategy, a theoretical model of recruiting effectiveness, in terms of its five critical elements, is developed from a review of current research literature. This model is then compared with a description of the existing Coast Guard recruiting program, forming a base from which useful conclusions and recommendations may be drawn.

In addition to the theoretical model, a unique computerized personnel data set has been constructed which allows for a description of the recruiting program's output in qualitative form as well as the practical exercise of this thesis' recommendations.

In order to describe comprehensively the current Coast Guard recruiting program and its performance in relation to both the quality and quantity dimensions, there was an initial need for system-wide performance data.

Specifically, what have been the output characteristics of the overall system, the districts and the recruiting offices? Considering the present lack of a computerized management information system, the question could not be answered as that type of data had never been collected in the past. While there were manual mechanisms for monitoring the quantity dimension, there were none for any other type of information.

Accordingly, in November 1982, with the funding and support of the Recruiting Division of the Office of Personnel (G-PMR), and the assistance of the USCG Training Center Cape May, an intensive effort was undertaken to construct a unique data set that would provide qualitative as well as quantitative data. The resulting data base includes demograhic and performance data, as outlined in

TABLE VI Recruit Data Points FY-82

- Name, first five letters of the last name
- Social Security Number
- Type of Enlistment
- District of enlistment
- Recruiting Office of enlistment
- Method of Contact
- Method of Follow-up
- Type of Recruiter
- Citizenship
- Education level
- Sex
- Marital status
- Mincrity group
- Religion
- Height
- Weight
- Ccast Guard Battery Scores
- Age
- Indication of Rephasal
- Reason for rephasal
- Entrance test used for qualification
- Score on that entrance test
- Date of Enlistment
- Indication of graduate of discharge from recruit training
- Reason for Discharge
- Company in recruit training
- Company ranking at graduation
- Rate upon graduation (SA/FA)

Table VI, for 3454 of the 3490 regular recruits who entered recruit training at TRACEN Cape May during FY-82. The data base does not include those recruits entering USCG Training Center Alameda prior to its closure in February 1982.

The significance of this data base is that for the first time, recruiting performance over a wide range of variables can be evaluated for the program overall as well as for each district, recruiting office and detachment. Supportive of the quantitative data already obtained, this is the first glimpse at recruiting which considers quality. Additionally, although cross-sectional in form, the data base offers the potential for a longitudinal study of recruit accessions for FY-82. In addition to the computer data based information, telephone interviews were conducted with each district's Enlisted Recruiting Supervisor, as well as with individual recruiters and Officers-In-Charge. interview was conducted in a similar manner using questions designed to provide a background on policy interpretations and implementation. The questions are provided in Table VII.

TABLE VII Interview Questions

- 1. Can you identify the performance measures that you use to evaluate the performance of your recruiting offices?
- 2. What performance measures do you believe are used by Headquarters to evaluate your district's performance?
- 3. Do you receive the Discharge Log from Cape May each Month? How do you use it?
- 4. What individual characteristics do recruiters in your district use to determine an applicant's "quality"?
- 5. How do you distribute your monthly quota among your recruiting offices?
- 6. Dc you have a formal recognition/reward program for your recruiters?
- 7. How many of your recruiters received any type of performance award during FY-82?
- 8. Can you identify one major problem within the Coast Guard's recruiting program?

II. EFFECTIVENESS HODEL AND LITERATURE REVIEW

A. BACKGROUND

The end of the military draft in 1973 brought several changes to the recruiting activities of the DOD services. Primary among these was a heightened concern about the quality of the All Volunteer Force (AVF). This concern served to initiate a broad range of research that is continually investigating the relationships between the various elements of the recruiting program and their potential to postively impact the quality dimension of manpower planning. While oriented to the DOD services, this research carries many useful implications for resolving similar quality issues facing the Coast Guard recruiting program. literature review is representative of the research linking various elements of the recruiting program to the enhancement of recruiting effectiveness and the achievement of a quality objective. In order, the following recruiting elements will be addressed: territorial potential, recruiter characteristics, number of recruiters, recruiting sources and management policy.

B. TERRITORIAL POTENTIAL

In a study prepared for the Naval Personnel Reasearch and Development Center (NPRDC), Dr. James Arima sought to develop a measure of recruiter effectiveness that would reflect the inherent potential of a territory for producing accessions. Recognizing that all territories did not share the same potential for generating enlistees, he sought to determine a set of variables that could fit into an equation reliably predicting the expected production of a recruiter.

In his initial attempts to predict net productivity, gress productivity corrected for attrition, the results proved unraliable. However when the qualitative dimension was considered, the measures became responsive to territorial differences. The resulting equation demonstrated the feasibility of utilizing educational data from the school districts to predict the expected recruiter production.

The findings of the study produced several interesting implications for the management of recruiting efforts. First, the author found that while the normal elements utilized by policy makers in establishing quotas (Qualified Military Availables (QMA) and number of high school graduates) were associated with the number of accessions from a territory, there was no statistically significant causal relationship. Further, these elements lacked any qualitative dimension whatscever in distinguishing the differing potential of the territories.

Secondly, the trend of assigning recruiter resources based on QMA resulted in dense metropolitan areas having large recruiting stations where recruiters spent inordinate amounts of time with unqualified applicants and produced poorer quality recruits. As an alternative, the number of female high school graduates proved to be the best predictor of quality recruit production in a given territory [Ref. 6].

The notion of territorial potential and the use of educational data as a determinant of quality is further supported by the findings of the Profile of American Youth. In a 1980 nation-wide administration of the Armed Services Vocational Aptitude Eattery (ASVAB), test performances were compared regionally. The mean AFQT percentile scores, when divided into the nine regional divisions utilized by the U.S. Bureau of the Census, identified New England as having the highest average (60), followed in order by the West Central (58), Middle Atlantic (53), East North Central (52),

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Mountain (52), Pacific (50), West South Central (48), South Atlantic (44), and the East South Central (42) [Ref. 7].

Emphasizing differing regional aducational performance, a study prepared for the Center of Naval Analyses assessed the impact of varying standards for GED certificates on recruit survival. Dividing the fifty states into four unique categories based on the stringency of GED requirements, the survival probabilities exhibited a consistent pattern of increased survival with increased requirements for achieving passing grades. The report suggests that benefits can be attained by treating GEDs from the states in a differential manner with regard to the applicant screening process [Ref. 8].

Through these research efforts, it is apparent that in allocating valuable recruiter resources as well as enlistment quotas, criteria superior to 2MAs and numbers of high school graduates exist. The research would suggest that these allocation decisions are not as simple as they may appear. The consideration of territorial differences offers the decision—maker greater flexibility and control over increasing the probabilities of achieving an improved recruiting/recruiter output (quality and quantity).

C. RECRUITER CHARACTERISTICS

As the organizational representative most directly involved in the recruiting process, the individual recruiter provides a unique set of personal characteristics, skills and abilities that have obvious potential impact on attracting desirable applicants. Several studies have focuses on the variety of characteristics required in developing a successful recruiter.

In a University of Wisconsis- Madison study, Individual Reactions to Organizational Recruitinbq: A Review, the authors examine the influence of the recruiter on the applicant's attitudes and job choice behaviors. The recruiter is identified as having a definite impact on the decisionmaking of the applicant. In reaching this conclusion, several specific recruiter characteristices were examined. Applicants were generally in agreement that age, verbal fluency, personality and current knowledge had positive influences on their decisions. The preference was for young, but not too young, recruiters with a "pleasing" personality, capable of discussing employment opportunities in more than general terms and prepared to offer a "smooth" presentation on the organization. Additionally, a job title positively influenced the perception of recruiter competence. Although not strongly supported, race was determined to have some impact as black applicants seemed to respond more favorably to black recruiters while race seemed of little importance to white applicants. Similarly, the support for sex as a determinant was near neutral as female recruiters were evaluated as "better than or at least equal to" their male counterparts [Ref. 9].

In addition to relating effectively to applicants, the recruiter must be capable of accomplishing a diverse set of non-recruiting tasks. Each military service is interested in identifying these additional skills as they may lead to proper performance evaluation as well as enhance the selection of potential recruiters. In a series of three studies prepared for NPRDC (Forman, Hough, Dunnette 1976; Borman, Toquam, Rosse 1979; Borman, Rosse, Toquam, Abrahams 1981), more than eight hundred critical incidents describing the range of effective to ineffective recruiter performance were initially reduced to nine descriptive dimensions. In final form for the last phase of study, the number of dimensions was further reduced to four:

- Selling Skills: selling Navy effectively to prospects: displaying confidence and effectiveness
- Human Relations Skills: establishing and maintaining gcod interpersonal relations with the prospects, recruits and persons in the community
- Organizing Skills: planning ahead, accurately completing paperwork
- Overall Performance: a composite measure of the three primary skills.

These performance categories, broken down by factor analysis, identify specific behavioral and vocational interest items that reliably predict desired performance. The study in final form provides a test battery composed of 110 personality and 60 vocational items that reliably predict Navy and Marine Corps recruiter performance.

D. NUMBER OF RECRUITERS

It seems obvious that the more recruiters there are in the system, the greater the output will be. Indeed this relationship has been verified in many studies [Ref. 6.]. However when the recruiting objective is broadened from mere numbers to include a quality dimension, and when the marginal cost of each additional recruit is considered among the alternatives for attracting applicants, increasing the number of recruiters must be reviewed more closely. Two recent studies address these issues as the marginal effectiveness of an additional recruiter is compared to the marginal effectiveness of increased advertising.

In a field marketing experiment conducted for the Naval Recruiting Command (NRC) by the Wharton Applied Recearch Center, advertising and recruiting resources were varied in systematic and controlled way. The advertising budget levels were varied from plus to minus one-hundred percent, and recruiter strength was varied from plus to minus twenty percent for fourty-three markets that were involved as either treatment or control markets. Among the findings, the experiment confirmed the significant relationship between the number of recruiters and the number of enlistment contracts signed. A similar strong relationship was observed between advertising budget levels and the number of enlistment contracts signed. With an increase in either determinant, the experiment revealed an expanded market share of the number of contracts for the Navy relative to the other services. Unlike advertising, recruiters were relatively more effective in recruiting individuals with life and career goals. Additionally, with advertising, a "lagged" effect was observed which indicated that advertising benefits may not actually occur until three to four months after the treatment.

When comparing the marginal cost differences, recruiters were determined to show the strongest and most consistent effects on enlistment, hence a relatively less risky investment, but at greater cost. In this report, the marginal cost for a recruiter greatly exceeded that of advertising. Additionally, the experiment observed that for both advertising and recruiters, as quality constraints are included, the marginal costs steadily increase [Ref. 10].

In the second study, <u>Recruiters</u>, <u>Advertising and Navy</u>
<u>Enlistments</u>, a regression analysis was utilized to determine the relationship between high school graduate enlistments, the number of recruiters and the level of advertising expenditures. The study's findings parallel those of the Wharton study: both the recruiter and advertising were determined to positively affect the number of contracts signed.

Additionally, the study noted a current year impact for the recruiter and a future oriented impact of advertising.

An interesting distinction of this study is that it identifies recruiters as affecting enlistments in the upper mental categories whereas advertising's greatest impact was with the lower mental groups. Additionally, although advertising maintains a marginal cost advantage over the use of recruiters with respect to "all high school graduates" (\$1700 to \$2200), when the quality dimension is considered by a comparison within mental group I - IIIU, recruiters develop a distinct advantage (\$2500 to \$4600) [Ref. 11].

E. RECRUITING SOURCES

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Recruitment is frequently considered a one-way process: the organization searching for prospective employees. In reality however, recruitment is a two-way process: prospective employees seeking organizations just as organizations seek prospective employees. Using this mating theory of recruitment [Ref. 12], success is achieved as the two form a simultaneous match. This match can be accomplished only when there is a common communications method: some form of contact linking both prospect and prospector. The recruiting program uses a variety of advertising methods for this express purpose: TV/radio, magazines, classified ads, direct mail, etc. The question then becomes one of identifying the most effective form of advertising from among the many alternatives.

In a study prepared for the Naval Recruiting Command, Richard C. Morey of Duke University used a variety of regression techniques to predict the impact of the various media alternatives on the number of national leads and the number of high school contracts. In general, he found that national leads were affected to a small degree by expenditures for general, non-minority TV/radio, very strongly by non-minority printing related expenditures, and very

strongly by territorial elements such as relative pay, propensity to enlist, unemployment, etc. The same characteristics affecting national leads similarly affect high school graduate contracts ... but with a two month lag.

Non-high school graduate contracts were affected most positively by quota, classified ads, minority advertising, general TV/radio and the territorial percentage of blacks. The author notes that one high school graduate contract results from approximately 44 national leads or 65 local leads.

As these initial findings were reviewed in the context of their relative cost effectiveness, the author concluded that the majority of expenditures should be directed in the area of printed materials, i.e. magazines, direct mail, newspaper supplements, etc. Using Navy CY-78 funding levels and at 78 dollars, the marginal costs per additional high school graduate contract for TV/radio was \$34,024; for printed materials, \$2,046; and for minority advertising, \$26,611 [Ref. 13]. In a subsequent report published in 1982, further analysis served to differentiate the variety of printed materials by their ability to increase the yield of male, non-prior service, high school graduate contracts. The use of general magazines was the clearly superior, followed by general direct mail, joint DOD magazine and finally, local newspaper/high school advertisement [Ref. 14]. Interestingly, this study is supportive of cthers reviewed in that the author indicates the greater effectiveness of recruiters as opposed to advertising in obtaining the higher mental group contracts.

The importance of efficiently matching the Coast Guard to prospective recruits is heightened when consideration is given to the scarcity of recruiting dollars and the declining population of 18 year old male, high school graduates. Population studies have shown that by 1992, there

will be 25 percent fewer high school graduates than there were in 1976 [Ref. 15]. As the competition for these resources with the DCD services and the civilian market begin to increase, consideration must be given to identifying alternatives that expand the traditional recruiting market sc as to locate increasing numbers of high quality recruits. In a recently released Rand Corporation report, two-year colleges and postsecondary vocational schools were identified as one viable alternative.

Looking first at the potential size of the market, the authors encountered some difficulty as the reports of total enrollment in two-year institutions vary greatly by source. Generally, considering only male students within the targeted age ranges for non-prior service recruits, the population is estimated at one million. If consideration is given to recruiting prior service students, as well as those exceeding the 18 to 21 age range, the population could swell by more than 500,000 men. With regard to meeting enlistment standards of age, ability, moral character, etc., these sources could positively impact the quality of the enlisted force. Geographically, these five largest concentrations of these potential recruits are in the states of California, Texas, North Carolina, Illinois and Ohio.

This market has yet to be significantly penetrated. The student's mcbility as well as their unstable educational and occupational aspirations imply great potential for military recruiting efforts. Past studies have indicated that members having postsecondary education experience lower attrition rates than do their counterparts having less education. With the right recruitment incentives and strategies (i.e. addressing student's educational expectations and occupational aspirations and financial needs), this market might be penetrated successfully [Ref. 16].

P. MANAGHENT POLICY

Whereas each of the preceeding four elements of the recruiting effectiveness model address the operational performance and potential of the recruiting system, the management policy element addresses crucial administrative functions that provide the impetus for operational action. Two particular aspects of the broad range of management actions will be addressed; goal setting - quota, and reward - recognition. Using goal setting decisions to focus organizational activity, and reward - recognition actions to identify and promote desirable recruiting behaviors, the recruiting management (Headquarters level) can exercise considerable control over the ultimate organizational output.

1. Gcal Setting - Quota

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Typically within the recruiting context goals, or quotas, are thought of in terms of their operational implication: statements of organizational manpower aspirations. They are generally short term in nature, one month or one year, and serve to direct recruiting behaviors in specific directions. There is another side of the goal issue however, that being the goal development decisions. In his book Organizational Effectiveness, A Behavioral View, Richard M. Steers identifies a major ingredient of success for a goal seeking organization to be its ability to "... clearly define the specific nature of the goals and objectives it wishes to pursue". He warns that the failure to address goal specificity may allow lower level managers unintended degrees of goal attainment discretion that can lead to conflicting efforts and wasted energies [Ref. 17]. Applying this concept to recruiting, we might first seek to clearly identify the qualitative as well as the quantitative manpower requirements. Secondly, we would review and evaluate the current goal setting mechanism, establishing the degree to which they actually transmit the specific desires of management to the various lower levels of the recruiting organization.

As important as is goal specificity, attention must be shared with goal difficulty. Research has indicated that performance is negatively affected when goals are perceived to be impossible to attain. Similarly, when goal attainment is perceived to be extremely easy, performance becomes less than efficient. To the extent that assigned goals are perceived to be moderately difficult and challenging, performance will be positively affected. In combination, the effect of increasing both goal specificity and goal difficulty is the enhancement of subsequent task performance [Ref. 18].

Having reviewed the development considerations in goal setting, it is useful to clarify the impact of goaling processes on the organizational output. A 1976 study for the Naval Recruiting Command attempted to identify [Ref. 19] whether changes in recruiting policies, specifically quota assignment to recruiters, could significantly affect the number of school eligible high school graduate (high mental category) enlistments. To no one's great surprise, the end result identified the district quota as being "positively and significantly related to the number of enlistments". Having supported the obvious by analysis, the resultant conclusion identified the effect of quota as inhibitive to production by its limiting of the number of enlistments.

When the authors combined this relationship with the concepts of territorial potential and the quality dimension, they identified several significant implications for management goal setting. Recognizing that each recruiting district varies greatly in its potential to produce high

quality recruits, and observing that districts with low quality potential could very well have disproportionately large pools of eligibles, one recommendation was to establish variable district quality requirements with regard to quota. The policy may provide that for a given quota, a variable percentage of that quota should be upper mental category recruits. For example, in a district where low quality potential exists (i.e., New Orleans), a low requirement for high mental category recruits may be established at maybe 55%, whereas in a district having greater quality potential (i.e. Boston), the high quality recruit requirement may be established at 70 to 80%. A policy of this nature could serve to minimize the inhibiting effects of quota as the military services recognize and attempt to satisfy the concurrent demands of quality and quantity.

In an appendix to this study, the authors address the determinants of black enlistments. The findings indicate a strong postive relationship for "recruiter" and a negative relationship for "quota". The conclusion drawn was that: 1) recruiters are necessary and valuable in "selling" the Navy to blacks, and 2) when quotas go up, recruiters become busier, have less time to "sell" to blacks and therefore intensify their efforts to recruit whites as it is easier to locate high quality whites than to do so for blacks.

2. Reward - Recognition

In the absence of recognized laws of human behavior, there is one type of behavior that approaches law: people continue to do what they have been rewarded for doing. A considerable body of research exists which serves to demonstrate the interrelationships between reward, notivation and performance. This research is inclusive of B.F. Skinner's

(1971, 1953) positive reinforcement, and Lawler (1973) and Vroom's (1964) expectancy theory which tell us that human behavior can be shaped by the expectation of a positive and desirable reward for some established behavior [Ref. 20].

Perhaps because the concept of rewards is so basic and well recognized, it has often been taken for granted and overlocked in organizational development. On the occasion when it does receive cursory attention, as the policy maker grapples with a reward system and finds that one person's reward is another person's punishment, one common solution has been to throw the baby out with the wash, purposely avoiding a difficult issue. In spite of the difficulties, and to take advantage of the obvious behavioral benefits, careful thought should be given to identifying the desired behavior and to the development of an appropriate reward and recognition system. In a well known practical application of Skinner's positive reinforcement theories, Emery Air Freight supervisors were taught to use positive reinforcement as a management tool. The company provided more than 150 types of recognition and reward ranging from a simple smile to detailed praise for extraordinary performance [Ref. 21]. The reward and recognition actions are not all expensive nor do they all involve the outlay of cash.

In his paper "On the Folly of Rewarding A, While Hoping For E*", Steven Kerr provides a variety of contemporary societal and business examples in which the behaviors being rewarded are those the rewarder is trying to discourage, while the desired behaviors are not being rewarded at all. In education, where society hopes that teachers will not neglect their teaching responsibilities, rewards are based almost entirely on the research and publication efforts that take them from the classroom. Similarly in sports, where the desired behavior is teamwork, the trophies and awards generally go to the player with the most

points or the greater number of homeruns: individual accomplishments. In the recruiting context, where the reward system, if it axists, focuses exclusively on quota attainment, should there be surprise if the assumed aspiration of quality fails to be achieved? Mr. Kerr's recommendations are for management to review and identify the behaviors that are currently being rewarded to ascertain the degree to which those behaviors match the desired behaviors of the organization. When differences are found, positive and affirmative action should be taken to change the reward system so that it will encourage and reinforce the desired behaviors [Ref. 22].

G. SUMMARY

In building a model of recruiting effectiveness for an organization having a quality objective, this literature review offers insight into the complexity of the recruiting environment. This recruiting effectiveness model is useful in that it divides this complex environment into individual elements, identifying their relationship to the quality objective. The research suggests that an effective recruiting program is one that:

- clearly defines in specific terms its goals and objectives,
- carefully selecting and training those recruiters having the appropriate personal skills and abilities beneficial in attracting and enlisting the desirable applicants
- prudently selects, balances and allocates its recruiting and advertising resources,

- apportions its quota levels advantageously in light of territorial differences, resource allocation decisions and program goals and objectives,
- and finally, maintains a capability
 to monitor system performance: recognizing,
 premeting and rewarding (thus shaping) those
 human behaviors deemed beneficial to the
 achievement of program goals and objectives.

This review emphasizes that quality is not an easy objective to achieve in that the costs, in terms of dollars and effort, are greater than those required for the achievement of quantity alone. Similarly, achieving quality objectives requires greater management investments as numerous macro-level decisions require the consideration of, and trade-off between, the various effectiveness elements. These decisions cannot be effectively considered at the lower levels. These research efforts indicate that as difficult as it may be to define quality, and as complex as the recruiting environment may be, a quality objective can be achieved through rational consideration of the elements and objective oriented decision-making.

III. THE CCAST GUARD RECRUITING PROGRAM

A. ORGANIZATION

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The Coast Guard recruiting mission is administered by the Recruiting Division (G-PMR) of the Office of Personnel within Coast Guard Headquarters in Washington, D.C. Divided into three branches: officer recruiting, enlisted recruiting and advertising, the division's responsibilities include publishing quotas, providing recruiting guidance to the district commanders, and serving as a coordinating point within Headquarters for all matters affecting recruitment of military personnel.

As depicted in Figure 3.1, the Coast Guard is administratively and operationally divided into twelve Districts, within which sixty-seven recruiting offices are located. At each district office, the Military Personnel Recruiting branch (pmr) supervises the conduct of the enlisted recruiting program within its boundries by coordinating the activities of the individual recruiting offices. 11 Although there are currently no active recruiting detachments, 12 the organization does have a provision allowing these offices to serve as sub-units of established recruiting offices. At current manning levels, the organization is supported by 243 recruiting billets.

Although not a formal element of the recruiting organization, Training Center Cape May, located in Cape May, New Jersey, is the single recruit training center. In February of 1982, as a result of FY-82 budget reductions, the second

¹¹The Saventeenth District processes its one quota per quarter through the Thirteenth District (pmr) as it does not staff a recruiting program.

¹²The result of FY-82 budget reduction actions.

U.S. Coast Guard Districts

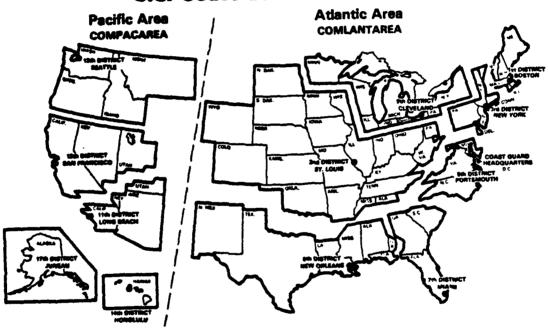


Figure 3.1 Coast Guard Recruiting Districts

recruit training center, Training Center Alameda, was permanently closed. The reduction to one training center, complicated by barracks structural problems at Cape May, has introduced a new variable, maximum training ceiling, into the manpower planning process. Having illustrated the relationship between quality (education attained and mental aptitude) and recruit training attrition in Table II, and Table IV, this factor alone suggest benefits to be obtained from identifying quality prior to enlistment. Clearly low quality requires greater training capacity.

B. OBJECTIVES

The recruiting programs's mission suggests three central objectives: 1) "...recruit qualified enlisted personnel...", 2) "...in sufficient numbers...", and 3) "...the proportion of minority members...". In addition to these, and perhaps less central in that it receives less explicit attention throughout the program, is a fourth objective, that being the recruitment of "...the best qualified personnel available" [Ref. 23]. For clarification purposes with respect to the first and fourth objective, the first objective, recruiting qualified personnel, serves only a (0) or a (1) purpose, insuring that each applicant clearly does or does not meet the minimum enlistment standards. In the fourth objective however, the scale is a continuous one suggesting that while quality may have no explicit definition, of those minimally qualified, only the best qualified will be selected.

C. GOAL SETTING - QUOTA

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The annual determination of enlisted manpower requirements is initiated within the Enlisted Personnel Division (G-PE) of the Office of Personnel. Prior to the beginning

of each fiscal year, the Programs Branch (G-PE-4) generates the enlisted Military Employment Capability Plan (MECP) identifying anticipated personnel transition flows. One utilization of this plan, exhibited in Figure 3.2. is to identify the number of recruits required to maintain the maximum authorized enlisted strength. A Having identified this quantitative dimension of the manpower requirements, this number is transmitted to the Recruiting Division where it becomes, with no specified qualitative parameters, the recruiting goal for the upcoming fiscal year. Subsequent iterations of the MECP are conducted to insure that target, but no more than target, strength will be achieved.

Within the Recruiting Division, several factors are considered as this annual goal is transformed into monthly district recruiting quotas. Among these considerations are:

- a desire to level-load the arrival of recruits to the training center
- the need to peak-load the training center
- maintenance of an equal production requirement for each recruiter
- allow for a light quota during the month of December
- the Commandant's policy seeking a 20% minority proportion in recruits.

These factors considered, of the total annual requirement (5474 for FY-83), 220 are designated for the month of December with the remainder being equally distributed through the remaining eleven months. Having developed the service-wide monthly quotas, each district's quota is apportioned by calculating its number of recruiters as a percentage of the total number of recruiters. For example, if the system-wide monthly quota is determined to be 460,

reserved addresses to the contractions

¹³Although there are Congressionally approved manpower ceilings, actual strength is that which is approved by the Office of Management and Budget (OMB).

		BILLST	BILISTED MILITARY DIPLOMENT CREASULITY PLAN	NG DA	PLOWER	T CAPAB	urry P	(NECP)		29 JULY 1982	1982			
7,11				1	į	3	į	ř	į		9		254	MAKE
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IN SUCH	~	2	2	7	2	2	7	2	2	2	2	2	24	~
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Ones	120	II.	120	110	125	170	165	113	130	150	130	140	1590	=
R234_ISDE245	230	235	137	277	224	253	181	193	203	283	255	269	2740	228
GYTTACX	2	2	2	2	2	2	2	2	2	2	2	2	24	7
NATURAL SE	797	465	130	465	597	465	465	595	220	465	597	465	5019	817
Ct EASE	31025	31073	30990	30956	31006	31026	20116	31248	31130	91109	31082	31022	372774	31065
GINET	:	+ 48	- 83	# .	os +	+ 20	18 +	171 +	- 118	- 21	- 27	- 60	0	°
				8	MENPLAS	ED PAY	CRACK (contemplated pay grade distribution	TION					
E-9	303	310	III.	310	311	31.2	716	RIL	31.7	11.7	315	309	3747	7
E-9	478	680	481	482	485	486	489	767	493	493	7 90	784	\$835	486
E-7	2651	2658	2658	2657	2659	2661	2665	2674	2673	2672	2670	2663	31961	2663
E-6	\$015	2020	5019	2000	5005	5007	2030	5042	\$038	5036	5034	\$025	60271	5023
F.5	\$265	5271	5270	1828	\$255	5257	5275	5290	5286	5284	5281	5270	63255	222
E-4	1724	3.38	7,30	7714	9111	1211	27.75	7755	1754	7746	1742	7732	42199	133
E-3	0667	9667	6667	7167	6/67	1867	1867	5020	5016	1105	\$006	6667	59952	9667
E-2	37.25	<u></u>	3728	3721	3726	3730	3735	3760	3756	3751	3744	3740	44847	13
E-1	874	877	800	847	867	178	877	895	800	799	800	800	10107	842
TUTAL	31025	3107.	30990	30956	31000	31026	31107	31248	31130	31109	31082	31022	37274	3106:

Figure 3.2 Military Employment Capability Plan

and the First District has 24 recruiters from the system-wide 243 (10%), their quota for the month will be 46 recruits (10%).

In publishing the monthly quota for each district, a portion of that quota is identified as the minority goal. To determine the apportionment of the monthly minority goal to the districts, the Recruiting Division refers to annual demographic surveys obtained from the Recruit Market

Network. The survey reports identify the minority populations within a fifty mile radius of each recruiting office. With these minority population breakdowns, each district receives a minority quota in proportion to the minority composition of their recruiting areas. (The demographic reports identify an area's minority composition in gross numbers only. The report does not provide composition by education level, age, sex, propensity to enlist, or any other variable.)

Once received at the district level, the quota and the minority goal are again apportioned among the individual recruiting offices. Although each district has considerable discretion in devising the methodology for goal-setting, the normal method is to evenly distribute the quota on the basis of the number of recruiters assigned to each recruiting office.

Throughout the goal-setting process, from initial development (G-PE-4) to the operational level (recruiting offices), the quota is expressed ONLY in its quantitative dimension. While there is the underlying premise that each quota be filled by a "qualified" individual, and there are expectations that they will be filled by "...the best qualified personnel available...", there are no explicit definitions of any standard of "quality" above that of the minimum enlistment standards.

D. QUALITY CONSIDERATIONS

In seeking to accomplish its mission to recruit qualified enlisted personnel, the recruiting program addresses quality through two mechanisms: enlistment standards and "selective recruiting".

1. Enlistment Standards

M1100.2) identifies for the recruiter the minimum eligibility requirements for an individual aspiring to enlist into the Coast Guard. These minimum requirements primarily seek to identify "adequate intelligence, a sense of responsibility, good moral character and a meeting of physical requirements". These are the individual characteristics that the recruiter is to attempt to identify. To do so, the requirements are divided into six elements: age, citizenship, character, mental requirements, physical requirements and dependents. Each of these elements will be addressed in such a manner as to detail the Coast Guard requirements or limitations.

a. Age

The acceptable age for enlistment of a non-prior service individual is less than 26 years of age but not less than 17. Applicants who are 17 years old require parental consent prior to enlistment. For an individual having prior active military service, including Coast Guard, and the enlistment is authorized at pay grade E-4 or higher, the age must be less than 35. Similarly, if the prior service enlistment is authorized at the pay grade of E-3 or below, the individual must be less than 30 years of age.

In effecting an enlistment within the Coast Guard, the individual is responsible for providing conclusive proof of the date of birth, place of birth and proper legal name. Procedures supported by standard form processing are available to the recruiter should it be necessary to verify the birth information.

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t. Citizenship

Generally only United States citizens or nationals are eligible for enlistment within the Coast Guard. The applicants are required to provide positive proof that they are citizens or nationals. In the case of a naturalized citizen, naturalization certificates are required.

The Commandant may authorize the enlistment of immigrant aliens provided they have been admitted for permanent residence. These individuals must meet all normal requirements as well as those specifically required for immigrant aliens.

c. Character

THE PROPERTY OF PERSONS A MARKETON

In an effort to establish the degree of an applicant's moral character, Coast Guard recruiters rely primarily on individual references, police record checks (where allowable), the applicant's personal statements and the recruiter's personal observations. Character references are required from all applicants. Using a standard form, the recruiter mails or personally obtains references from each school attended in the past three years as well as each employer of the three past years. In addition to these, three personal, or other applicant suggested references are obtained. References exclusively from relatives or close friends alore are unacceptable.

Evidence of the applicant's involvement with civil authorities raises caution flags regarding the applicant's moral character but does not automatically provide cause for rejection. Where not hampered by state laws, recruiters use a standard form to obtain police record checks from every city, town and county in the United States in which the applicant has resided since his/her sixteenth birthday, or the last five years, whichever is the latest period. The Recruiting Manual provides a detailed itemization of factors that contribute to the ineligibility of an applicant. The manual allows that individuals convicted of "minor offenses", as investigated by the recruiting officer, may be enlisted provided a determination is made that the individual is fit for service in the Coast Guard.

The recruiter is encouraged to consider his/her personal appraisal of the applicant's moral character.

Through a visit to the applicant's home or following the enlistment interview and personal interaction, the recruiter's judgement is a crucial determinant in identifying desirable moral character.

d. Mental Requirements

CHAMBIEND CONNECTOR CONCERNATION AND CONCERNATION

The Coast Guard requires that each applicant be a high school graduate or possess a high school GED certificate prior to the date of enlistment. In the case of a high school senior enlisting in the Delayed Entry Program (DEP), failure to graduate results in a discharge from the DEP. Additionally, each applicant, including those with prior military service, must successfully complete an entrance qualification examination. As of 1 February 1983, the Coast Guard joined with the DOD services in the utilization of the

ASVAB for enlistment qualification. The minimum qualifying score on the AFQT composite is 40.14

e. Physical Requirements

Applicants for enlistment must meet the physical standards as outlined in the Medical Manual (COMDTINST M6000.1). In assessing the aplicant's physical condition relative to these standards, three levels of review are utilized. In the first, the recruiter conducts an informal screening of the applicant in order to detect any gross physical defects that would obviously result in rejection. In the second review, a pre-enlistment physical is administered by a local contract physician or personnel located at a DOD Military Enlistment Processing Station (MEPS). resulting physical is reviewed by the recruiter as well as at the district level in an effort to detect any physical deficiencies. After successfully passing these two reviews, the individual is enlisted in the Coast Guard and transfered to the recruit training center where the final review is conducted. Prior to the recruit departing the recruiting office, he/she is made aware the the training center physical MUST be passed prior to being permitted to enter recruit training.

f. Dependents

The number of dependents an applicant may have is contingent upon the pay grade into which the enlistment is made. Generally, unmarried applicant's should be unencumbered, though it is permissable to contribute to the financial support of no more than two individuals in the permananent legal custody of another adult. Applicants

¹⁴This minimum qualification score, in terms of mental category, represents a score ten points below the Category IIIA level.

enlisting into the E-1 thru E-3 pay grades are permitted two dependents whereas those enlisting into the E-4 and above are permitted three.

Inclusive within this requirements element is the recruiter's review of the applicant's Statement of Financial Obligatoin/Wife's Consent form. Relative to the potential income of a recruit, indication of excessive indebtadness requies a review and approval by the district commander (p) prior to enlistment. Additionally, married applicants must obtain a signed statement from their spouse indicating an understanding and agreement to the enlistment contract that their spouse is about to enter.

2. Selective Recruiting

Recognizing that the recruiting quotas deal strictly in numbers, the recruiting organization seeks to fill those numbers with quality individuals through the concept of "selective recruiting". This concept clearly states that although an applicant may meet or exceed each and every minimum requirement, he/she is NOT automatically entitled to enlist. The recruiter, based on his or her service experience, perception of the current and projected service needs, and understanding of the recruiting environment must give consideration to the manner in which the applicant's qualifications blend together. This emphasis on the "whole person" evaluation forms the primary basis of identifying "quality" within the Coast Guard recruiting program.

3. Summary

In considering both the enlistment standards and the concept of selective recruiting, the Coast Guard expresses both an explicit set of minimum standards and a stated desire to select quality individuals. To a degree, the minimum standards assist selective recruiting in that they

clearly identify the rejects from those that are acceptable. However, in operationalizing the personally subjective standards implied in the "whole man" evaluation, the Coast Guard itself becomes captive to more than two-hundred levels of personal experience, perceptions of service needs and evaluations of the recruiting environment. It is unclear within the recruiting organization whether this level of discretion and ambiguity in defining quality exist by design or by default.

E. RECOGNITION - REWARD

Within the recruiting program, as promulgated by the Recruiting Manual, there are no policies or guidance with respect to a positive recognition or reward system.

Although prior to 1975 the Recruiting Division did conduct a Recruiter-of-the-Year competition, it was discontinued when it was determined that there were insufficient valid measures indicating superior performance. Currently each individual district, when cognizant of superior recruiting performance, can freely pursue the established Coast Guard procedures for recognizing and rewarding that individual.

F. EVALUATION AND CONTROL

MERCHANIC CHARACTER, STREET, STREET,

The primary performance and output evaluation and control instrument utilized throughout the recruiting organization is the Monthly Report of Recruiting Activity (CG-2957). Initiated by every recruiting office on the last day of each month, the, the report is forwarded to the district office (pmr) where, in consolidated form, each recruiting office's performance is evaluated for its contribution to the assigned district's quotas and goals. By no later than the fifth day of each month, these district reports are forwarded to the Recruiting Division where,

again in consolidated form, program-wide performance is monitored and evaluated relative to its organizational goals and objectives.

Inclusive of both the regular and reserve enlisted programs, this report comprehensively tracks recruiting efforts by identifying applicant transitional flows. The information included in the report is depicted in Table VIII.

TABLE VIII Monthly Report of Recruiting Activities

- * Number of new, canceled and rejected applicants
 - identification of reason for rejection
- * Number of recruits
- * Number of non-rate and petty officer enlistments
- * Size of the waiting list
- * Quota and percentage obtained
- * Number of applicants being processed but not appearing on the waiting list
- * Number of women enlisted
- * Minority goal assigned and percentage obtained
 - breakdown by minority group
 - number that are school qualified
- * Delayed Enlistment Program (DEP) scheduled by month
- * Number of recruiters assigned
 - number of minority recruiters assigned

In addition to the historical data provided by the documentation of program performance, the monthly report serves as a valuable management tool as it identifies areas of weakness and forms a base from which trend analyses can be performed. Quantitative in form and content, the elements

of this report reflect both the primary program objective (quota and minority goal attainment), and a future supply oriented concern (waiting list and applicant growth rate).

If the recruiting division were to rely soley upon this monthly report for performance monitoring, it would experience time related evaluation and planning difficulties in that the report is not received until mid-month. Operating on a monthly quota cycle, there is an information need earlier in the planning process. Addressing the informational need, each district (pmr) is tasked to submit a Recruiting Progress Report, in message form, on the last working day of the month. The report provides information similar to that contained in the monthly activities report:

- * total regular enlistments
 - number of minority and women included
- * total reserve enlistments (RP and RK)
 - number of sinority and women included
- * total other reserve enlistments
 - number of minority included.

At year's end, the twelve monthly reports are summed to produce the Recapitualtion of Regular Recruiting Activities. Compiled within the Recruiting Division, this report, depicted in Figure 3.3 and Figure 3.4., serves as a synopsis of the year's recruiting activities as it includes both the regular and reserve enlisted programs. The report is diseminated throughout the recruiting organization as a performance reporting document. To some extent, the report does offer a representation of program effectiveness as it does include both quota/goal and performance data.

Whereas the above reports allow for the monitoring of the enlistment of appropriate numbers of individuals, one other report allows for the monitoring of recruit performance in recruit training. Once weekly, Training Center FISCAL YEAR - 8:

		THE MCGUPLE			TOTAL PE	TLAR.				
Markor	MONTHS? ATC. NO. MICHOLITHMS CHECARD	SULTANGUES SUSTANS SUS	PLISTONES FOR MICHIGAN FOR HOSTE	RECULAR RELIFICAT QUOTAS	 milionents		SERVER ACCOUNTINGS ACCOUNTINGS	COALS	POTAL PULISTED	% OF BOLUSTES BOLUSTES
1	25	507	1.69	423	424	35	100.2	19	23	5.4
2	31	723	1.94	583	588	66	100.9	69	167	28.4
3	34	722	1.77	586	587	54	100.2	93	134	22.8
5	27	624	1.93	516	520	68	100.8	125	117	22.5
7	25	620	2.07	486	490	66	100.8	153	188	38.4
8	26	663	2.13	513	518	53	101.0	155	187	36.1
9	21	568	2.25	434	435	45	100.2	72	79	18.2
11	17	364	1.78	301	301	33	100.0	52	53	17.6
12	17	439	2.15	323	329	32	101.9	50	50	15.2
13	19	404	1.77	288	291	32	101.0	18	17	5.8
14	1	40	3.33	13	14	2	107.7	<u> </u>	-	-
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	243	5674	1.95	4466	4497	486	100.7	806	1015	22.6

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CATEGORIES OF ENGULAR ENLISTMENTS

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Sectional Section	4206	69	24	48	30	95	25
Castonist Taxonist	93.53	1.53	.53	1.07	.67	2.11	. 56

Figure 3.3 Recapitulation of Recruiting Activities

Cape May compiles and publishes the Weekly Training Report (CG-3696) identifying those individuals discharged prior to the completion of training. Identifying each recruit by name, the report provides the name of the recruiting office processing the enlistment as well as the reason for discharge. Although provided weekly to the Recruiting Division and to the districts, no specific actions are generated by the report. At the Recruiting Division level, the reports are consolidated at the end of the fiscal year and utilized in the planning process. Within the districts, although is is assumed that they are used appropriately, actual use ranges from a detailed review to a casual glance.

In addition to the bottom-up reports, there is considerable informal, two-way communications between the various organizational levels as waivers are processed, policies are clarified and problems are solved. Though the frequency of these communications varies, it does offer opportunities for evaluating program performance on an informal basis.

G. ADVERTISING - MARKETING

The advertising and marketing efforts in support of the enlisted recruiting program is administered by the Advertising Branch (G-PMR-4). Divided into two primary media groups, electronic and print, the Branch utilizes a variety of media sources: radio, television, national magazines college newspapers and direct mail. With both media groups, the Advertising Branch is assisted in the technical, creative and implementation areas by a contracted external advertising agency and a contracted fulfillment house.

Within the electronic media group, at least one new television spot commercial is developed each fiscal year. This new spot, in addition to those previously produced, is distributed annually to each of the three national networks,

USCG - REGULAR

MILISTED APPLICANT RESOURCE AND DISPOSITION TOTALS FISCAL YEAR - 52

	r													
30000077700		2	3	5	7		9	11	12	13	114	17	1 \$	TOTAL
WATERS LIST AND APPLICATES PROCESSES	410	429	627	460	422	243	502	215	24?	232	20	-	•	3902
MAN APPLICATES PRINTE CRIMENT FT	1270	1980	1655	1871	1910	2252	1409	1034	912	817	76	-	•	15186
AFFLECARE DESCRIPTION TO SERVICE	1680	2409	2282	2331	2332	2495	1911	1249	1154	1049	96		· •	18988
CARRELIN APPLICATE	196	416	281	402	100	373	252	45	243	140	1		12.9	2452
TONE SECTION	761	1041	893	1068	1319	1316	798	702	427	452	45		46.5	1922
(a) PHISTOAL PARTIES	108	163	103	110	91	128	114	73	32	51	5	Ŀ	111.1	975
(v) (minut malana	303	584	399	622	614	924	406	299	249	142	24	-	(51.8	4569
(·) com strains	350	292	391	336	014	264	278	330	146	259	16	-	(37.1	₹?76
TOTAL BEZINGEN	424	588	587	520	490	518	435	301	329	291	14	-	23.7	4497
9-30-82 WATERS LINE	115	147	236	102	205	105	194	45	66	88	5	-	6.9	1306
9-30-82 APPLICATED PROGRAMENT	184	217	285	239	218	183	232	155	99	78	31	-	10.1	1911

Figure 3.4 Applicant Resource and Disposition

two cable outlets (CNN and TVS), and the 500 largest local broadcasting stations. Additionally several radio commercials, cf both 30 and 60 second duration, are produced and given a similarly wide distribution. Due primarily to the restrictive budgetary resources, 15 the electronic media advertising effort is dependent largely upon the generosity of broadcasters in using Coast Guard commercials for public service arnouncement material. During FY-82, the Coast Guard DID NCT purchase radio or televesion air time. In that same time period however, after incurring \$120,000 in production and distribution costs, data derived from the Broadcast Advertiser's Report indicated that the Coast Guard received a dollar equivalent value of public service air time in excess of \$3.9 million.10

The greatest single portion of the advertising budget (32% for FY-82) is reserved for the print media as its cost par lead falls more into line with the budgetary constraints. Additionally, a careful selection of appropriate national magazines and college newspapers allows for greater focusing of the advertising effort on targeted segments of the population. As the Coast Guard is experiencing a healthy general recruiting environment, these advertising efforts are being directed to the most significant area of need: minority and female recruiting. Accordingly, magazine advertising for these groups utilize: Essence, Severteen, Business World Women, Jet, Ebony, Selectiones and Nuestro.

In an effort to measure the number of leads generated, and to approximate a measure of effectiveness for the advertising efforts, two forms of data collection are available. In the first, for each applicant who actually enlists, or

¹⁵The FY-82 Coast Guard enlisted recruiting advertising budget of \$648,000 can be compared to that of Navy (\$12.1M), Army (\$57.8M), Air Force (\$7.5M) and Marine (\$10.2M).

¹⁶The report applies to television advertising only, and does not include cable network air time.

begins processing and becomes a "canceled applicant", an Applicant/Enlistee Profile Questionnnaire (CG-5060) is completed by the recruiter. One item of this form, labeled "How initial contact was developed", is intended to indicate the primary medium of Coast Guard information that stimulated the applicant's desire to contact a recruiter. Although designed to gather useful information, historical data indicates that the form is not a reliable measure of advertising effort.

For the second data collection method, the Coast Guard has contracted for an "800" telephone service. The "800" number appears in each form of advertising and is monitored continuously by personnel trained to obtain profile data from each respondent. While this method does identify a portion of the leads developed by each media source (more than 30,000 in FY-82), and it does allow for the follow-up distribution of applicant literature, it does not provide sufficient data to measure advertising effectiveness. Recording only the "800" users, and lacking supportive, reliable information from the recruiting offices, there is considerable potential for the miscalculation of the advertising impact. The recruiting program does not have sufficient resources (budgetary, personnel or technology) to identify leads by source, quality or final disposition. Lacking the data capturing and analyzing ability, the effectiveness of the advertising effort is largely unknown.

H. RECRUITERS

The recruiting manual clearly identifies the recruiter as "... the most important element of the recruiting program." As such, considerable care and effort are devoted to the comprehensive screening and selection process. The selection process is initiated by the recruiter himself as

each member of the Coast Guard recruiting strength is a volunteer. 17 The availability of recruiting billets is advertised within the Coast Guard through the Commandant's Bulletin and other mediums. Within many districts, the district recruiting personnel actively seek to identify and recruit their own recruiters.

During the initial screening conducted within the Enlisted Assignents Eranch of the Office of Personnel (G-PE-5), the applicant's personnel file is reviewed so as to identify positive performance evaluations, a desirable caraer pettern and a favorable endorsement by the applicant's Commanding Officer. Upon satisfactory completion of this initial screening, an applicant interview with with the appropriate district recruiting staff is authorized. Additionally, in conjunction with the applicant interview, a structured interview following a standard format, the 16-PF personality profile examination is administered. During the interview itself, and with each subsequent content review, the process seeks to identify the applicant's level of motivation, attitude, communications ability, professional competence, personal confidence and adaptability to the unique out-of-rate demands of recruiting duty. Upon a positive review by the district staff, the Recruiting Division and the Enlisted Personnel Division, the individual is available for assignment to recruiting duty.

Formal recruiter training is accomplished during a three week comprehensive course conducted at Training Center Govenor's Island, New York. In addition to thoroughly reviewing each chapter of the Recruiting Manual, recruiters receive training in salesmanship, public speaking, telephone sales techniques and interviewing skills. In defining the organizational expectations with regard to recruiter produc-

¹⁷As of 28 February, 217 of the 243 recruiting billets were filled, 25% with minority recruiters.

tion, two criteria are emphasized: quota/goal and "selective recruiting". The instruction identifies "selective recruiting" as the recommended quality analysis technique. The instruction recommends that recruiters respond to a "gut reaction" in appraising an applicant's appearance, attitude and general demeanor. Using this technique, the ultimate test of an applicant's potential is found in the recruiter's response to the question "Would I want to serve with this person?". Throughout the course of instruction, recruiters are encouraged to be "selective" in the filling of their quotas.

In allocating recruiter resources, the Coast Guard does not attempt to canvas the entire United States. Rather, considering the number of recruiters, the goal is to cover the major population centers, concentrating on the surburban areas where possible. Given the district boundries depicted in Figure 3.1, the number of recruitiers assigned within each district district10 are listed in Table IX.

The number of recruiters assigned to each district is a significant element of the recruiting program as it is the primary determinant in assigning monthly quota. While there is no current algorithm fot the allocation of recruiter resources, it is apparent that an areas total and minority population characteristics are given considerable weight. As was the case in determining the minority goal apportionments, the population numbers utilized are devoid of the qualitative element. The Recruiting Manual currently tasks each district commander to review biennially his recruiting office locations and staffing levels to ensure their most effective utilization. Additionally, the biennial report reviews the validity of assigning quotas based primarily

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¹⁶FY-82 Recapitulation of Recruiting Activities.

TABLE IX
Allocation of Recruiters by District

District Head	<u>lquarters</u>	<u>Number</u>	<u>of</u>	Recruiters
First	- Boston, Ma.		25	1
Second	- St. Louis, Mo.		31	
Third	- New York, N.Y.		34	•
Fifth	- Pcrtsmouth, Va.		27	,
Seventh	- Miami, Fl.		25	•
Eighth	- New Orleans, La	•	26	•
Ninth	- Cleveland, Oh.		21	l
Eleventh	- Long Beach, Ca.		17	•
Twelfth	- San Francisco,	Ca.	17	1
Thirteenth	- Seattle, Wa.		19)
Fourteenth	- Honolulu, Hi.		•	1

upon the number of authorized recruiters. Due on 1 April of each odd calendar year, the first series of reviews are currently being completed.

IV. <u>DISCUSSION</u>

A. REVIEW

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The opening chapter of this thesis introduced the evolving demand for quality personnel as a result of the Coast Guard's increasing employment of advanced technology. Similarly, the Ccast Guard's historical performance in attracting quality personnel was reviewed, as was current recruit training and 'A' school performance trends. comparing the trends in quality supply versus the anticipated demand, it was evident that without organizational change, the increasing demand for quality would not be attained. This trend did not escape notice by the Commandant as significant organizational changes were implemented (i.e. elevated mental aptitude enlistment standards: imposition of a scholastic enlistment requirement and the development of the Education Enrichment Program). Significant as these changes are, there remains considerable room for consideration of the quality demands. After identifying numerous alternatives for achieving quality objectives, an input/control strategy implemented by the recruiting program was identified as the most effective. This alternative proposes that quality considerations be explicitly stated as front end objectives in manpower planning (addressed in the recruiting process), rather than after-the-fact training objectives for individuals that have become a part of the system.

The first chapter recognizes the "fuzziness" surrounding the term quality and thus seeks to sharpen its meaning by introducing two representative measures: education attainment and mental aptitude. Representative of an individual's aptitude, attitude and ability, these two proxies for quality provide recruiters with tangible screening elements and offer the recruiting organization valid and reliable indicators of expected individual performance.

Although attainment of quality objectives may seem straightforward, those persons laboring within the recruiting program recognize the many complexities involved. The second chapter, by dividing the recruiting process into singular elements, attempts to add order and direction to the quest for quality. Through a review of current recruiting literature, the chapter links various elements of the recruiting program to the enhancement of recruiting effectiveness and the achievement of quality objectives.

The literature review creates a model for viewing the recruiting program at two organizational stages: planning and implementation. Considering first the planning stage, the research is suggestive of two precepts common to a quality oriented recruiting program: 1) success in addressing the quality dimension can be achieved ONLY when an organization develops an ability to define clearly and specifically its quality objectives, and 2) each recruiting territory has an inherent potential for generating applicants. Accepting these two precepts, the effective organization proceeds through the planning stage:

- carefully selecting and training recruiters who posses the skills and abilities necessary for attracting desirable applicants
- prudently selecting, balancing and allocating limited recruiter and advertising resources
- effectually apportioning goals and quotas based on a district's unique potential for generating quality applicants, and
- anticipating program adjustments to result from an objective based evaluation and control system.

During the implementation stage, the literature review suggests four essential steps to the effective accomplishment of quality objectives:

- clearly and specifically define both quality and quantity objectives
- transform these objectives into challenging, yet attainable, quotas and goals
- formulate an evaluation/control system consisting of measures clearly identifiable with each program objective, and
- recognize, promote and reward (thus shape) those human behaviors beneficial to objective accomplishment.

Though seperate for discussion purposes, the planning and implementation stages function simultaneously within the dynamic recruiting program, each stage complementary to the other.

Following the literature review, the existing Coast Guard recruiting program is described in terms of its organization, objectives and management policies. After reviewing both the goal setting and performance evaluation processes in some detail, it became evident that the recruiting program seemed to consider primarily the quantitative dimension. From the initial goal determination, external to the recruiting program, to ultimate performance summary (Recapitualtion of Regular Recruiting Activities), primary attention is focused upon quota attainment and minority goal accomplishment at all organizational levels.

Although the quality dimension is not comprehensively defined within the recruiting program, the program does not operate in complete absence of quality considerations. The Recruiting Manual specifically provides recruiters with

the second support, expense, ordered,

enlistment standards containing the minimum quality determinants. Additionally, through the concept of "selective recruiting", recruiters are encouraged to be selective in their fulfillment of quota obligations.

As the chapter points out, this overemphasis upon quantity should not be interpreted as a unilateral, cognitive decision on the part of the recruiting division. Clearly the recruiting division is responding to the performance measures and program objectives established by the Office of Personnel (G-P). Whereas the literature review identifies that the quest for quality requires comprehensive program objectives, the annual recruiting goal is determined and assigned to the recruiting division lacking in absence of the quality dimension. Hence that goal is transformed to the monthly quotas and passed to the districts in a similar manner. Similarly, while the literature review indicates that effort will be expended in those areas subject to performance measuring, the recruiting divisions performance measures lie narrowly within the quantity dimension. Hence when district recruiting performance is measured, it is done so in a similar, quantity oriented manner. Again, while the literature review clearly identifies quality recruiting as requiring additional recruiter and advertising resources, the recruiting division experienced budgetary and personnel losses during FY-82. Accordingly, these losses were apportioned throughout the recruiting program. Achievement of the quality objectives thus requires support from the Office of Personnel to the recruiting division as well as from the recruiting division to the district and recruiting offices.

Having presented the earlier chapters to identify a problem (quality dimension), present a theoretical base for discussion (literature review), and outline the boundry for action (recruiting program), this chapter will synthesize these elements by resolving this primary question: How effective is the current recruiting program?

B. EFFECTIVENESS EVALUATION

Recruiting effectiveness has been introduced as one criteria commonly utilized for evaluating a program's performance. As defined, a level of effectiveness is determined by comparing a program's outputs with its stated objectives along the quantitative and qualitative dimensions. A program is said to be effective to the extent that its objectives are achieved. Therefore, in order to identify the Coast Guard recruiting program's level of effectiveness, we must identify both the units of output, the specific objectives to be achieved and methods for operationalizing each.

Recruiting program outputs are generally expressed in terms of the characteristics of those individuals processed within the program as either rejected or accepted applicants. For the purposes of this evaluation, effectiveness will be measured by considering only those applicants accepted within the FY-82 recruiting year. By reviewing the recruiting division's evaluation and control instrument, the Monthly Report of Recruiting Activities, Table VIII, and the Recapitulation of Regular Recruiting Activities, Figure 3.3, and Figure 3.4, three program output measures are identified: 1) Total Enlistments, 2) Female Enlistments, and 3) Minority Enlistments. As previously noted, total enlistments (quota) and minority enlistments (minority goal) are broadly recognized within the recruiting organization as the most important performance measures.

Four program objectives have been identified: 1) qualified enlisted personnel, 2) sufficient numbers, 3) minority proportion, and 4) best qualified available. Through interviews with Enlisted Recruiting Supervisors (see Table VII), common understanding and broad acceptance of the first three objectives was evident. With regard to the fourth objective

however, considerable differences were noted as to the definition, or existence, of a "best-qualified" objective. Of these four objectives, the second and third are clearly quantitative in nature, while the first and fourth are qualitative.

1. Cuantitative Dimension

To consider first effectiveness in the quantitative dimension, program outputs (Figure 3.3) are compared to the second and third objectives respectively, sufficient numbers and minority representativeness. From this comparison it is evident with both objectives that program performance exceeded expectations as quota accomplished was 100.7% and the total minority enlisted exceeded goal by 26%. Viewing the data in greater detail, the performance of each district appears to follow similarly desirable patterns as each met or exceeded the assigned total enlistment quota and seven of ten met or exceeded their assigned minority goal. Looking beyond the stated objectives by reviewing Pigure 3.4, it appears that recruiters have been somewhat selective in filling their quotas as the number of rejections is twice the number of accepted applicants. Similarly, Figure 3.4 is indicative of a bealthy recruiting program as the end-ofyear waiting list is representative of a three month supply for enlistments.

By comparing the recruiting program's quantitative output, as defined by the existing program performance measures, with the quantitative objectives, it is apparent that a significant level of effectiveness has been achieved.

a. Limitations

When reviewing the data points (located in the monthly report and the recapitualtion) that are utilized for the quantitative effectiveness detarmination, two questions

need be asked: 1) "Does it provide data sufficient for the evaluation of each objective?" and 2) "Is this report sufficiently descriptive of recruiting program performance?" If both answers are in the affirmative, we should be satisfied with the aforementioned effectiveness evaluation and proceed no further. If either answer is in the negative, further investigation would be desirable.

In answer to the first question, the existing performance measures clearly lack the qualitative data required to support an evaluation of the first and fourth objectives (qualified and best-qualified). This point will be addressed in detail in the following section.

Viewing the second question in the context of current recruiting performance measures, the data appear quite sufficient in a quantitative sense, however there is one limitation. At the current time, the recruiting division's organizational responsibilities extend only to the front gate of the recruit training center. The task of the racruiting division is to provide sufficient numbers to the training center, hence the performance measures extend just to the recruit's arrival at the training center. As a result, the recruiting division's responsibilities and performance measures are absent from any consideration of the survivability of recruits through recruit training. Of the five military recruiting programs, the Coast Guard's is the only one that systematically excludes recruit attrition from recruiting performance evaluation considerations. Within the DOD services, recruit attrition is a determinant factor in program and individual recruiting performance. These services have apparently recognized that a recruiting program experiencing a 95% output survivability is a more effective program than one having only an 81% survivability rate.

The obvious objection to the inclusion of survival data into the evaluation base resides in the fact that recruit survival is a function of numerous variables beyond the limited control of the recruiting program. While this is a basically sound argument and is partially supported by the PY-82 data shown in Table X., it does not absolve the recruiting program of limited responsibility nor does it lessen the budgetary impact of a recruit training

TABLE X

Cause Factors for Recruit Discharge

Cause Factor	Number Discharged	Percent Discharged
Medical	272	41.8
Refused Training	2 25	34.6
Emotional Problem	67	10.3
Academic Deficiency	40	6.1
Swimming	32	4.9
Pregnancy	9	1.4
Other	6	1.1
	651	100.0

attrition rate exceeding 18%. For that portion of attrition controllable within the recruiting program, the recruiting division should harbor concern and react in a supportive and aggressive manner in reducing recruit attrition.

At the present time, Training Center Cape May provides the recruiting division and each recruiting district office with a weekly Recruit Discharge Log. The log provides information on each discharged recruit: name, date of discharge, reason for discharge and the individual's recruiting office. The recruiting division's expectations

are that the valuable management tool will be used as such by the districts in concerted efforts to reduce attrition. In actual practice however, enlisted supervisor's responses to interviews indicated that the log's usage ranges from nil to a detailed identification of the circumstances surrounding a non-medical discharge. While identifying the reasons for the non-use or limited use, it became obvious that the districts considered the generation of the log to be cut of training center interest rather than the recruiting division. At the district level, this translated into a perceived lack of interest by the recruiting division. Further, when districts do use the log, they do so on a weekly basis and therefore do not have a strong awareness of their annual attrition rate. When questioned, each supervisor consistently underestimated the annual attrition rate experienced by his district for FY-82. Lacking the identification of recruit attrition as a performance measure and a problem area, concern is not universally shared by those capable of reducing it.

This attitude should not be surprising as it is an illustration of Steven Kerr's "On the Folly of Rewarding A, While Hoping for E*". Within the recruiting program, recognizing that recruit attrition is not an element of performance measure, there is no incentive to reduce costly attrition.

In order to review a partial impact of attrition, the data base developed for this thesis allows a re-examination of the quantitative dimension recognizing attrition. As shown in Table XI, of the 4497 total enlistments, 3652 recruits completed recruit training. When this number is compared with the assigned quota (4466) and adjusted for programmed attrition (14%), 19 the expected

¹⁹Provided by (G-PE-4).

TABLE XI
Impact of Recruit Attrition

Dist	Tctal Enlist	Attrite (%)	Out- put	Minority Enlisted	Minority Attrite	Minority Output
	424	15.4-(2)*	-352 -	23	29.2	17
2	588	21.7 (8)	462	167	31.4	116
3	587	17.4 (4)	486	134	33.6	89
5	520	17.2 (3)	432	117	21.9	92
7	490	19.3 (6)	396	188	19.0	153
8	518	24.1 (10)	394	187	29.6	132
9	435	17.9 (5)	359	79	33.3	53
11	301	19.3 (6)	245	53	15.6	45
12	329	23.8 (9)	252	50	41.7	30
13	291	14.3 (1)	25 1	17	25.0	13
14 CG	14 4497	12.5	13 3652	1015	 27.0	- 741

^{*} relative ranking from 1 to 10 exclusive of the relatively small contribution from the Fourteenth District.

recruit training output (3841) was underachieved by 189
(4.2%) recruits. Using a similar analysis, the minority
goal (806) adjusted for expected attrition indicates that
the expectected output (694) was overachieved by 47 minority
recruits. Table XI indicates that the performance of each
district with regard to recruit survivability exhibits
considerable variation. While it must be emphasized that
recruit attrition IS NOT the sole responsibility of the
recruiting division, it is nevertheless important to
consider survivability in the determination of effectiveness
as its impact is significant. What was once a strongly
positive quantitative level of effectiveness is now somewhat
diminished by the consideration of recruit survivability.

while it is again evident that the causes for a recruit training attrition rate of 18% do not lie exclusively within the domain of the recruiting program, neither does it lie exclusively within the Education and Training Division nor the Operational Medicine Division (G-KCM-1). Having a medically related attrition rate of 7.8% and a non-medical rate of 10.9% indicates the need for global concern on the part of each division involved. The reduction of recruit attrition requires the acceptance of joint responsibility and shared determination for action by the three divisions.

2. Qualitative Dimension

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Effectiveness determinations within the quantitative dimension were relatively straightforward as both the objectives and performance measures were readily apparent. Within the qualitative dimension however, such is not always the case as qualitative data is substantially absent from the current performance measuring process. Nevertheless, through utilization of the thesis data base, a level of effectiveness can be determined for the first and fourth objectives (qualified and best-qualified).

a. "Qualified Enlisted Personnel"

The recruiting program currently addresses this first objective through the process of implied assumption. Having provided recruiters with detailed minimum enlistment standards and a requirement that each applicant attain these standards prior to enlistment, the assumption is that the task has been accomplished and therefore all recruits are "qualified". This assumption is not supported by qualitative data.

During FY-82, there were no scholastic requirements for enlistment into the Coast Guard. In lieu of these requirements, each applicant was to achieve at minimum a combined score on the Coast Guard Standard Test (CGST) representative of the Mental Category IIIB. Had each individual truly reflected these standards, the Coast Guard would not have accepted any individuals falling into mental categories IV or V. As determined by administration of the Coast Guard Standard Test Battery (CGSTB) at Cape May, the recruits entering in FY-82 followed the distribution depicted in Table XII.

TABLE XII
Recruits by Mental Category

FY-82 Mental Category Distribution

Mental Group	CGSTB Range	% Attained
1811	110 - 195	42.0
III A	101 - 109	22.2
III B	90 - 100	22.7
IV & V	0 - 89	13.1

The point to be made is that the administrative establishment of a minimum qualification score is not sufficient to warrant the assumption that quality standards are being maintained. To further illustrate this point, even though each recruiting district operates with the same quidelines, a review of Table XIII indicates that some districts are more effective than others at screening for the minimum mental aptitude standards.

TABLE XIII
Mental Category by District

Category I - IIIB 	Category IV & V
85.8	14.2
88.7	11.3
83.9	16.1
80.6	19.4
76.1	23.9
89.1	10.9
93.2	6.8
94.4	5.6
98.5	1.5
100.0	0.0
86.9	13.1
	92.3 85.8 88.7 83.9 80.6 76.1 89.1 93.2 94.4 98.5

Similar difficulties have been identified with respect to the minimum physical requirements. In a recent review of 200 recruit medical boards conducted by the Operational Medicine Division (G-KOM-1), [Ref. 24], it was determined that 61 cases should have been detected during the initial examination and 30 cases should have been detected on review (an additional 13 cases were questionably detectable). While the physical examinations and medical reviews are beyond the control of the recruiting division, they do have an obvious and measurable negative impact on the recruiting program.

The evaluation of this objective indicates that the Coast Guard in general and some districts in particular experience a degree of difficulty with the accomplishment of a thorough applicant screening process. Underlying the obvious is the more subtle point that the difficulties have existed for some time, yet the performance evaluation and control processes appear unable to detect it in a timely manner or focus attention to the specific areas in need of improvement. Interviews with recruiting supervisors indicated that most lacked a clear understanding of the mental category percentiles. Hence, while the mental category distribution of their district may have been lower or higher than that of the program overall, their complete unawareness precluded a qualitative program adjustment.

These quality shortfalls are of timely interest in view of the existing peak loading situation at Cape May. By reviewing Table III and Table X, it is evident that those individuals in mental category IV & V, and those medically deficient contribute significantly to recruit attrition. The costs are considerable in terms of travel funds, training dollars, training time and training space. (One training report has identified the cost of transportation for medically discharged recruits to be near \$200,000.) 20 As evidenced by the FY-82 program and district mental category distributions, the historical distributions evident in Figure 1.2, and the physical examination and review difficulties, the recruiting program's performance with respect to recruiting qualified enlisted personnel falls short of the first objective achievement.

b. "Best Qualified Available"

This fourth objective exists to some degree as an anomaly: not specifically stated in the Recruiting Manual nor clearly defined within the recruiting program. Where the first qualitative objective benefited from a (0) or (1), qualified or not qualified definition, this fourth objective enjoys no such normative understanding. Similarly, where

^{20 (}G-PTF) FY-82 Training Report.

the gcal of the first objective was presumably to have <u>all</u> recruits "qualified", this objective has neither a stated goal nor recognized performance measure capable of providing a "best-qualified" determination. The critical nature of this anomaly cannot be overstated. How can the recruiting program be expected to provide for the quality dimension in manpower planning if it does not know what it is or how much is desired?

Having neither a recognized understanding of the objective nor performance measures to identify the units of output, a meaningful measure of effectiveness cannot be obtained. In lieu of an evaluative analysis this objective will be approached from a descriptive perspective, developing both the objective's definition and potential performance measures.

Complying with the recruiting manual, individual recruiters indicated during interviews that "selective recruiting" provides the practical basis for "best qualified" determinations. When questioned further as to the meaning of selective recruiting, it became apparent one man's best qualified applicant was another's rejected applicant. Each of the more than two hundred recruiters vary in their application of service experience, perceptions of service needs and evaluations of the recruiting environment. Several recruiters suggested that it was not uncommon for newly assigned recruiters to be hesitant to invoke selective recruiting cut of a fear of attracting a Congressional inquiry. In these cases, the minimally qualified applicant becomes synonymous with the best qualified applicant.

Due to the inherent subjective nature in the application of the selective recruiting concept, it can be considered neither a valid nor reliable measure of recruit quality. This is not to say that selective recruiting does not have legitimate value in the applicant screening

process. It most certainly does. Selective recruiting provides a necessary consideration of an individual's disposition and deportment. In other words, selective recruiting allows for the consideration of the "non-quantifiables". However it must be clear that in and of itself, it DOES NOT measure quality. If not selective recruiting then what?

Referring to the initial discussion of quality measures and to the literature review, there are two valid and reliable criteria of quality; education attainment and mental aptitude. Research has consistently supported the hypothesis that individuals of higher mental categories and education attainment levels exhibit greater probabilities for surviving recruit and subsequent training. [Ref. 4] and [Ref. 5] Therefore, the search for a valid and reliable definition of "best qualified" need go no further. Assuming the accomplishment of the minimum enlistment standards, and in conjunction with (not in place of) selective recruiting, a best qualified individual is one who exhibits a high education attainment level and mental category.

Having narrowed the objective's definition, the recruiting program remains tasked with the necessity to identify the degree to which the objective must be obtained. As recognized within the Department of Defense, 21 no service can efficiently employ a force composed entirely of upper mental category personnel. There is need for a mix of mental category I, II, IIIA and IIIB individuals. (This conclusion is supported within the Coast Guard by reviewing the broad range of scores serving as 'A' school qualification standards.) Considering the many variables that enter into a "quality-mix" determination, there is an obvious requirement for data and decision making authority beyond

²¹Discussions with Dr. R. Lockman, Center for Naval Analysis.

the organizational scope of the recruiting division. The most appropriate level for the quality-mix determination would lie within the Enlisted Personnel Division (G-PE) as they maintain the responsibility for conducting the Coast Guard's manpower planning. Where the division currently projects both the annual enlistment goal and the 'A' school training loads by seperate processes, a joint compilation could result in an enlistment goal inclusive of the quality objectives. The manpower planning system currently in use by the Navy22 provides their recruiting command with quality targets: (%) High-school graduates, (%) Mental Category I-IIIA, and a ceiling (%) Mental Category IV. While the Navy's recruiting program certainly does not represent an ideal as far as quality in recruiting, this element of their program can provide a basis for Coast Guard modifications. Given quality targets that could be developed by the Enlisted Personnel Division, the Recruiting Division could then be concerned primarily with the implementation issues.

As the "best qualified" objective is defined throughout the organization, performance measures must necessarily be developed. As identified from the literature review, the performance measures must be valid, reliable and clearly understood by those whose performance is to be measured. The measures must accurately and comprehensively communicate the organization's expectations to the operational levels. Four such measures operationalize this objective and can be derived from data readily available within the recruiting program:

- <u>High School Graduates (HSDG)</u>: Representative of the education attainment criteria of quality, this measure

²²Pcintpapers utilized by ADM. HAYWARD in a presentation to the Naval Postgratuate School, December, 1982.

identifies the percentage of recruits obtaining the minimum high school requirement.

- <u>Mental Category I-IIIA</u>: Representative of the mental aptitude criteria for quality, this measure identifies the percentage of recruits most likely to be qualified for the more demanding technical oriented rates.
- <u>Minority Mental Group I-IIIA</u>: Recognizing the organizational objectives to promote minority representativeness, this measure provides a more sophisticated indication of the potential for objective achievement.
- High School Graduate (HSDG), Mental Group I-IIIA,

 Recruit Training Graduate (GRAD): A composite representation of the qualitative and quantitative dimension, this measure identifies the percentage of output achieving each of the three criteria. This measure effectively offers a "bottom line" measure of quality output.²³

These measures of output must be compared to quality targets established for the recruiting program in order to determine a level of effectiveness for this objective. Had such targets been generated for FY-82, the data reported in Table XIV could be used for this comparison.

Recognizing again the absence of quality targets for the recruiting program, this data should not be reviewed to evaluate target performance as the goal setting process did not identify quality targets. In a descriptive sense however, a review of the data does provide insights into the varying performance levels of the program as a whole and recruiting districts in particular.

²³The development of this qualitative composite is consistent with the research of Dr. Arima as noted in [Ref. 6.].

TABLE XIV
Alternative Performance Measures

District	H S DG	Category I-IIIA	Minority I-IIIA	HSDG + GRAD + I-IIIA
1	94.2 (1) *	68.2 (5)	29.4 (7)	53.2 (3)
2	89.4 (7)	62.8 (7)	40.0 (4)	42.1 (8)
3	92.0 (4)	67.0 (6)	35.9 (5)	48.6 (4)
5	90.8 (6)	57.5 (8)	25.5 (9)	42.2 (7)
7	91.3 (5)	54.9 (9)	32.1 (6)	37.2 (9)
8	85.0 (8)	50.0 (10)	24.1 (10)	34.8 (10)
9	93.1 (2)	75.2 (2)	29.4 (7)	54.3 (2)
11	82.5 (9)	72.0 (4)	48.1 (2)	48.0 (5)
12	79.2 (10)	72.2 (3)	64.3 (1)	43.5 (6)
13	92.9 (3)	78.6 (1)	44.4 (3)	57.7 (1)
14	100.0	80.0	0.0	50.0
CG	90.3	64.1	33.0	45.4

^{*} relative ranking from 1 to 10 exclusive of the relatively small contribution from the Fourteenth District.

The benefit from the first measure, HSDG, is evident when viewed in conjunction with the recruit attrition data presented in Table XI. Those districts experiencing high attrition rates generally exhibit lower percentages of high school graduates than do those experiencing small attrition rates. This relationship is statistically significant as can be demonstrated by a rank order correlation²⁴ of district performance with regard to HSDG and recruit attrition (P = .764, p < .01) [Ref. 25]. In terms of effectiveness, those districts enlisting greater numbers of persons with a high school diploma (or GED certificate) contribute more to program effectiveness than do

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²⁴Use of Spearman's Roe nonparametric statistic.

those districts enlisting lesser percentages of high school graduates. The empirical data provides an indicator of quality output and supports the established link between education attainment and training survivability.

Though beneficially providing a useful screening tool for the reduction of recruit attrition, the HSDG measure is not, in and of itself, a unitary measure of recruit quality as 35% of the high school graduates are not included in the mental categories I-IIIA. Comparing the HSDG and Category I-IIIA data, it is evident that the acquisition of a high school education is not necessarily indicative of the mental aptitude. Although a district may obtain a high relative ranking for the recruitment of high school graduates, it does not necessarily follow that the same district receives a high ranking for the recruitment of upper mental category recruits. Again statisticaly comparing the relative rank orders in district performance for the variables HSDG and Category I-IIIA, the correlation (p = .261, p > .1) is weak. The weakness of this correlation is particularly notable with minority I-IIIA ($\rho = -.30$, p > .1). These findings clearly indicate that percent of High school graduates alone is an inadequate measure of quality output: hence the requirement for an additional "best-qualified" measure. This point is significant in light of the program changes implemented earlier this year. The data clearly indicates that the establishment of a high school graduate (or GED) enlistment standard will not in itself be sufficient to insure the accomplishment of quality mix targets: there remains a need to cognitively consider mental aptitude in the recruit screening and program performance processes.

Recognizing the second element of quality
(mental aptitude) and providing a more direct measure of
"best-qualified" performance, the following two measures are

appropriate: Category I-IIIA, and Minority I-IIIA. literature review suggests that consideration of these measures should include recognition of each district's inherent potential to produce quality output. Given the disparity between the public education systems found within the Eighth, and Thirteenth districts, their widely varying quality distributions should not be surprising. (Territorial potential and its managment implications will be addressed separately.) Additionally, the lower percentages of minorities within the upper mental categories is not unexpected. Nevertheless, should it be acceptable that within scme districts only five of ten recruits qualify within Category I-IIIA? Lacking clear direction, administrative requirement or behavioral incentive to identify and recruit persons in the higher mental categories, this data illustrates the penalty paid for the sole utilization of the "selective recruiting" concept to identify quality.

The ultimate concern of the Coast Guard is the actual quantity/quality input into the personnel system upon completion of recruit training. After accounting for quota accomplishment and adjusting for attrition, what is the "bottom line"? The final "best-qualified" measure (HSDG + GRAD + Category I-IIIA) is indicative of the annual quality input by program and district. Consideration of this final measure is necessarily dominated by the district's quality production potential. While the relative district rankings are representative of this potential and cannot be appreciably altered by the Coast Guard, the percentage attainment levels can and must become targets for change within the Coast Guard. In a descriptive sense, when compared to the normal quantity program performance measures of Table XI, this seasure indicates the program's quality performance in the absence of quality evaluation and control. An effectiveness determination would require the establishment of a percent objective for this measure.

C. EFFECTIVENESS SUMMARY

When reflecting upon the preceeding analysis, the degree to which the recruiting program is effective in the achievement of its four objectives is primarily dependent upon the performance measures utilized and the point in time of measurement. For the quantitative objectives (quota attainment and minority goal accomplishment), utilizing the traditional quantitative performance measures provided in Figure 3.3 and observed prior to the commencement of recruit training, the program overall achieves a significant level of effectiveness. Reviewing the effectiveness of each recruiting district under the same conditions, a similarly desirable level of effectiveness is achieved. Yet this bright picture of effectiveness is somewhat dulled by extension of the point in time of measurement to include attrition experienced in recruit training. The data provided by Table XI identifies weakness at divisional level as well as the district level. Inclusion of the attrition element reduces program quantitative effectiveness from 100.7% of goal to 95.8% of goal.25 More significantly, when district performance is adjusted for attrition, the pravicusly reported quota attainment range of 100.0 to 101.9%, 26 is decreased to 75.9 to 84.6% of quota.27 While at first the adjustment for attrition may not appear significant, it acquires operational significance when the adjustments are converted to dollar equivalents: travel dollars, training dollars, training time and training space.

²⁵See computations on page 75 and 76.

²⁶Exclusive of the lightly goaled Fourteenth District.

²⁷Factoring out medical attrition, the range becomes 85.3 to 91.8%.

Continuing the analysis by expanding the performance measures to include the qualitative dimension, the concept of effectiveness is likewise broadened beyond traditional considerations. Where previously the central context of performance measurement revolved around the question "Are we recruiting enough people?", the qualitative dimension broadens the context to include "Are we recruiting the right people?". A review of the third objective identified performance that was dysfunctional to program effectiveness as 13% of the recruits tested below the established minimum mental aptitude standard. Significantly, this percentage is not adjusted for attrition: these "less than minimally qualified" individuals are passing through recruit training and into the operational Coast Guard. In addition to these shortfalls in effectiveness, the review identifies similar difficulties with the achievement of physical enlistment standards. This review supports the need to broaden the existing performance measures to include the quality dimension. Clearly the program cannot rely on the existence of administrative policies and procedures to insure the achievement of quality objectives: there must be quality performance evaluation and control processes.

At perhaps the greatest distance from the traditional, one dimensional perspective of effectiveness, the analysis of the fourth objective introduces three concepts for consideration: 1) a definition of a "best-qualified" applicant, 2) quality-mix determination in goal setting and performance evaluation, and 3) quality oriented territorial potential. With the introduction of each, it becomes evident that achievement of effectiveness within the quality dimension is not concomitant with quantitative effectiveness. The analysis identifies the inconsistency of quality output realized from the application of "selective recruiting". Clearly that one concept is an inadequate

screening tool for quality. The lack of specific attention to the quality objectives through the goal setting and performance evaluation processes has resulted in their less than significant accomplishment.

In summary, the analysis describes a program that is experiencing a level of quantitative effectiveness less than that indicated by its current performance measures. Similarly, the level of effectiveness is less than that assumed and required by the administrative policies and procedures. In both cases, the data suggest that benefits can be achieved through a review of the program elements and their relationship with the program objectives and the evaluation and control process.

V. CONCLUSIONS

The research indicates that with respect to the qualitative AND quantitative dimensions of manpower planning, the recruiting program is performing at less than its potential level of efectiveness. In terms of Steven Kerr's "On the folly of rewarding A, while hoping for B", the recruiting program (Cffice of Personnel, Recruiting Division, Enlisted Personnel Division) is rewarding quantity while hoping for quality. In reality, you get only what you ask for.

A. NOT DESIGNED FOR QUALITY

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In summary, the research points to the conclusion that the recruiting program simply is not designed for quality. As a result of the over-emphasis upon quantity and the unfortunate, general expectation that quality will naturally arrive with quantity, the quality objectives are at best loosely defined. Similarly, quality considerations are practically absent from the critical program elements of goal setting, performance evaluation, resource allocation and general program planning and support. The infusion of technology into the Coast Guard, with the resulting demand for high quality personnel, has brought about an awakening to the consideration of these quality issues.

B. EFFECTIVENESS AND PROGRAM ELEMENTS

The establishment of an evaluation and control process presumes an ability to evaluate program performance and an inclination to utilize the resultant performance data, adjusting and adapting the program to conform with dynamic program objectives. Having discussed at some length the

performance of the recruiting program, there remains the task to identify the program elements that are candidates for change as well as targeting the direction of change.

At the cutset, it will be useful for the reader to understand that the comprehensive discussion of each program element in relation to the program objectives, and to other elements, is individually a potential topic for further research and investigation. The limited purpose of this section is to identify general directions and magnitudes of change appropriate in light of the evolving demands being placed upon the recruiting program.

1. Qualitative Cbjectives Defined

Whereas the qualitative objectives in their current form introduce the primary quality issues ("qualified" and "best-qualified"), they fail to operationalize fully those issues. The identification of a best-qualified applicant and the pricrity placed upon the enlistment of quality are unfortunately abrogated to the middle and lower organizational levels. For example in two proportionately large recruiting districts, having been provided with only the minimum quality standards (while hoping for best-qualified), the expressed attitude is: "if the Coast Guard wanted better than the minimum they would ask for it: minimally qualified is as good as best-qualified."28 Within these districts, there are no concerted efforts to attract better than the minimum. You get what you ask for.

The provision of a more detailed definition and broader perspective on the quality issues throughout the recruiting organization represents one avenue for enhancing program effectiveness.

²⁶Interviews with recruiting supervisors.

2. Territorial Potential

Control of the second

As is evidenced by the program's current procedures for allocating recruiter resources, apportioning minority goals and targeting advertising efforts, there is recognition of quantity oriented territorial potential. Simply put, those districts with a greater resident population receive more recruiters, a higher minority goal and greater saturation of advertising efforts than do those districts composed of lesser populations. This policy has led to a greater concentration of recruiters and recruiting efforts along the East and Gulf coasts despite the steady migration of the population westward. (The geographic distribution of recruiting billets appears in Table IX.) Describing the distribution of recruiting resources by geographic regions, the greatest concentration appears in the South Atlantic/South Central (Districts 5,7,8), followed by New England/Middle Atlantic (Districts 1,3), North Central (Districts 2,9), and lastly, Mountain/Pacific (Districts 11, 12, 13, 14).

Just as each district exhibits and recognizes the presence of this quantity potential, there exists, though systematically unrecognized, a quality potential as well. Introduced in the literature review, demonstrated in Table XIII and supported by Table XIV, one characteristic of each recruiting district is its inherent potential to produce "qualified" and "best-qualified" applicants. Describing regionally the quality potential as determined by the 1980 administration of the ASVAB to 11,914 youths, greater potential resides in New England/Middle Atlantic, followed by North Central, Mountain/Pacific and lastly, South Atlantic/South Central [Ref. 7.]. The Coast Guard data generally conforms to this pattern with the exception of the Mountain/Pacific where performance indicated in Table XIV exceeds that which the comparison would have predicted.

Entering a recruiting environment where the qualitative dimension of manpower is receiving increasing attention, the quality oriented territorial potential is one planning element that must not be ignored. Just as the quantitative potential is reflected in the strategic decision making process, so must the qualitative potential be considered. For example, in the recent review of minority goal apportionment, only the number of minorities within a fifty mile radius of the recruiting office was considered. Ignored were the quality characteristics of those minorities: age, education attainment level, mental aptitude, etc. As a result, districts having a high population of minorities but lower quality will now provide greater numbers of marginally qualified minorities who will attrite with greater frequency and be of a lower mental aptitude than the average recruit. The end result will be that yes, minority goal (quantitatively) will be achieved, but when reviewed in light of the performance measures presented in this thesis, in a potentially ineffective manner.

Within the recruiting program, there are two specific program elements where consideration of the quality oriented territorial potential can prove beneficial to the enhancement of program effectiveness.

a. Resource Allocation

CHARGE THROUGH

Comparing the recognized quantity potential as described regionally with those regions of quality potential, there is one point of stark divergence: the Coast Guard's greatest concentration of recruiting activity occurs precisely in the region of greatest relative mental aptitude weakness [Ref. 7.]. The Fifth, Seventh and Eighth districts jointly produce proportionately greater numbers of mental category IIIB, IV and V individuals than either of the

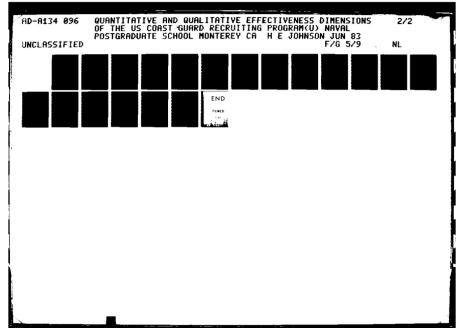
remaining regions.²⁹ This is not surprising in view of the regional quality potential. Conversely, while the Coast Guard receives greater proportions of upper mental category individuals from the Eleventh, Twelfth and Thirteenth districts, that region receives the smallest levels of recruiting resources. Unfortunately, while the quality product of the latter region greatly exceeds that of the former, the quota and resource differentials are so great that the lower quality production is not overcome.

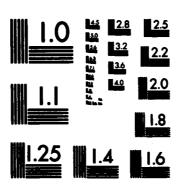
Reflecting on the recruiting environment in existence when the initial recruiting resource allocations were determined, and recognizing the incremental process of subsequent change, the current resource allocation strategy is easily understood. Nevertheless, the recruiting environment is changing, the priorities are being altered by the impact of technology and the easy-to-use incremental change process is inadequate. The distribution of recruiter resources is in need of large scale review and alteration. The quality oriented territorial potential is a real, live, phenomena deserving attention and inclusion in resource allocation decision making.

b. Quality-Mix

The futility of employing a force composed solely of upper mental category individuals was previously mentioned, as was the concept of quality-mix: a quota/goal definition of the quality objectives. As the program-wide quality-mix determintion is determined and provided to the recruiting division, the remaining task is to distribute effectively that quota/goal to the recruiting districts. Whereas current methods would result in a distribution based upon the assumption that each district share the load

²⁹See Table XIII and Table XIV





MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

(quantity potential), the result would actually impose a burden upon those districts in the Southern region. This research would suggest the recognition of each district's unique quality potential as the basis for that quality-mix distribution. The data of Table XIII and Table XIV indicate for example, recruiters in the Thirteenth district would experience less difficulty in recruiting upper mental category individuals than would recruiters in the Eighth district.

The operative understanding and advantageous use of quality potential as a planning factor in the apportionment of recruiter billets, assignment of minority recruiters and distribution of quota/goal represents a second avenue for the enhancement of qualitative effectiveness.

3. Recruiters

The Recruiting Manual correctly identifies the recruiter as the most important element of the recruiting program. As the ultimate implementor of policy and procedures, the performance of that individual is a key element in the quest for quality objective achievement.

Accordingly, recruiter performance serves as the common denominator in this analysis: "What policies or procedures must be altered, developed or otherwise emphasized so that he/she can recruit individuals of the appropriate quality and in sufficient numbers to meet program demands?"

While each is fully capable of understanding and accomplishing the quantitative objectives, recruiters and their variable understanding of the quality dimension represent a major obstacle in the achievement of quality objectives. Resulting from school training and the interpretation of written guidelines, recruiters have a very restrictive and biased view of quality determination. As has been discussed at some length, the sole utilization of

"selective recruiting" as a basis for quality determination is inadequate and deceiving. Among recruiters however, denunciation of "selective recruiting" is blasphemy. In every discussion of education and mental aptitude criteria of quality, a recruiter is guarenteed to resurrect the story of the Category I individual that was sent to Cape May only to be discharged for a poor attitude. The data provided in Table II and Table IV clearly indicate that this myth is without substance. Combining the overemphasis upon quantity with the misconceptions concerning quality, recruiters represent an organizational barrier to quality attainment.

appear due primarily to the available literature identifying preferred quality determination criteria and the postive attitude, high motivation and genuine concern characteristic of the Coast Guard's volunteer recruiting force. Recruiters have an insatiable desire for constructive performance feedback. Recruiters invest considerable personal pride in their recruits, they want them to be successful. Recruiters want to provide the product that they think the Coast Guard needs. Recruiters can identify and screen for quality when they are instructed as to the proper criteria, and provided timely and accurate feedback.

Providing recruiters with one common, clear and operationally determinable definition of quality will provide a third avenue for the enhancement of qualitative effectiveness.

4. Management Policy

while territorial potential addressed the recruiting program's external environment, and recruiters were identified as those individuals implementing the recruiting program, management policy IS the recruiting program. Providing the program's structure, defining its boundry and

establishing its character, management policy is clearly THE dominant program element. As such, it is essential that management policy embrace and exist in consonance with concerted efforts to enhance the program's effectiveness. Assuming that this is so, that management policy is adaptable and in pursuit of effectiveness, three policy extensions are essential to achievement.

a. Goal Setting

The literature suggests that as a standard measurement of adequacy, a goal setting mechanism must clearly define in operational terms the nature of the program's objectives. Judging by that standard, the current goal setting mechanism would score poorly. Consisting of just two elements, quota and minority goal, the current mechanism ignores the remaining quality objectives. This is primarily due to the program's inability to define specifically those quality objectives. The result of this goal setting weakness is that two signals are disseminated throughout the program: 1) a strong, clear, unequivocal demand for quantities of recruits, and 2) a somewhat hollow, ill-defined and ambiguous request for quality recruits.

The recruiting quotas and goals, from initial inception to ultimate monthly distribution, are devoid of explicit quality considerations. At each organizational level involved in goal development however, there is an awareness of the Coast Guard's quality requirements: the organization needs personnel qualified for the AT, AE, ET, ST, FT and other technical rates. Yet in practice, the program asks for enlistment quota/minority goal while hoping to fill the high quality requirements.

Previous analysis suggests that while this goal setting mechanism may be anemic, it is not terminal: each objective can be transformed into specific goals. Via the

acceptance of "quality" as defined by education attainment and mental aptitude, the quality objectives can be addressed. The Enlisted Personnel Division, in coordination with the Recruiting Division can develop quality-mix targets that would identify throughout the program the goals pertinent to the qualitative dimension. The weak and ill-defined second signal can be made as strong and as clear as the first.

Adjusting the current goal setting mechanism to comprehensively be inclusive of <u>all</u> program objectives provides a fourth avenue for the enhancement of recruiting effectiveness.

b. Performance Measurement

As the gcal setting mechanism identifies the direction for the recruiting program, the performance measurement process establishes the priorities. Viewed from the bottom of the organization upward, the performance measures identify those areas of performance that are of apparent greater interest to management; hence those areas receive the lion's share of attention and energy. If the program's goals are to be achieved, there must be a recognizable conformity between the comprehensively stated goals and the established measures of performance. Within the recruiting program, the good news is that there is a degree of conformity; the bad news is that the goals are incompletely stated.

Viewed from the top of the organization, the existing shallow performance measures are similarly troublesome. By implying a comprehensive review of program performance, these quantitative measures obscure qualitative performance. By halo effect, it is assumed that quantitative success produces qualitative success as well. The data indicate that this is not always the case.

Just as it is possible to define the qualitative objectives in a comprehensive goal format, so it is with the performance measures. Likewise, where it is necessary to provide, through goals, a direction for the qualitative dimension, it is necessary to identify the priority placed on quality by the development of qualitative performance measures. Qualitative performance measures that require information readily available from within the recruiting program are demonstrated in Table XI and Table XIV. When at the operational levels there is a recognition of management's interest in education attainment, mental aptitude, recruit attrition and the qualitative dimension, similar recognition and priority will be forthcoming.

Enhancing the current performance measures to include measures pertinent to the qualitative objectives represents a fifth avenue to the enhancement of recruiting effectiveness.

c. Reward - Recognition

Once the program's direction are defined and priorities established, the remaining task is to apportion the program's human energies. In this process, driven by human nature, recruiters are aware of their behavioral requirements and can discriminate between those that result in reward and recognition from those that do not. Quite simply, recruiters are like the rest of us, those behaviors that result in some reward will be repeated and those that are without benefit will be repressed. It is therefore incumbent upon the recruiting program to identify those behaviors that are rewarded (and thus repeated) in a comparison to the behaviors that are desired. Where an equality comparison requires no action, differences will require an evaluation and resultant action.

there are no positive rewards. From the districts's perspective, the absence of negative recognition must substitute for a positive reward. Accordingly, as identified through interviews with recruiting supervisors, the accomplishment of quota and minority goals are perceived to be the essential criteria to the avoidance of negative recognition. As a result, the behaviors that are rewarded are those that accomplish quantitative goals. There are no rewards for quality and likewise, no rewards for reduced recruit attrition: hence no incentive to devote energies to these priorities.

Within the tan districts, five have developed some variation of a positive raward and recognition system. Via the presentation of a plaque or a letter of appreciation, saveral districts seek to promote superior recruiting performance. In doing so however, the districts have been left to their own devices to establish criteria for "superior recruiting performance". The result is that performance rewarded in one district is no doubt considered routine by another. The implication program-wide is that there has been no cognitive attention to the identification of desirable behaviors and no specific action to promote "superior recruiting performance".

This current situation evolved from the Recruiting Division's abandonment of the Recruiter-of-the-Year award. While at the time there were insufficient performance measures to discriminate the superior performance from that normally expected, such is no longer the case. The data provided by consideration of the qualitative dimension provided in Table XI, Table XIII and Table XIV clearly identify a range of performance.

By the establishment of a "Recruiting District of the Year" Award, the Recruiting Division could provide a clear communication of its goals, objectives and priorities as well as establish those behaviors considered to be superior. In the wake of Division level action, as each district develops its individual recognition programs, the recruiting program would be the primary beneficiary of improved recruiter performance. Considering the recent reduction of recruiter proficiency pay, and the increased efforts and new behaviors that will be required in the achievement of qualitative objectives, the timing could not be better for the healthy injection of POSITIVE reward and recognition.

Development of criteria and recognition of superior recruiting perfermance can align the expected and actual human behaviors, thus representing a sixth avenue for the enhancement of recruiting effectiveness.

d. Program Support

The difficulties described do not begin and end within the Recruiting Division. That division is well aware of the research and emphirical evidence that supports recognition of the increased level of dollar and personnel resources required to recruit high quality individuals. It clearly takes more time and energy to attract and recruit exceptionally qualified individuals rather than the minimally qualified: yet budget and personnel reductions are imposed. The case must be made within the budgetary process that "people" are the Coast Guard and "quality people" provide a quality Coast Guard. An increased level of resources at the front end (recruiting) will reduce the resources required to conduct subsequent training and Education Enrichment Programs.

C. IMPACT ON MINORITY REPRESENTATION

If the reader can recall the third objective, minority proportions, and review the minority mental aptitude distribution of Table XI, a question may arise as to the impact upon minority representation of a recruiting program emphasizing quality recruiting. The simple answer is that the impact can be either positive or neutral: it does not have to be negative.

The point must be made clear that the term "minority" is not an antonym for "quality" and efforts to achieve both are not mutually exclusive. A program seeking a 20% minority representation does not have to do so at the expense of quality. Likewise, a program seeking a quality-mix proportion of upper mental category recruits does not need to sacrifice minority goal attainment. The two objectives represent urgent Coast Guard needs and can be pursued in consonance. In spite of its first appearance, there is no zero-sum game: no one or the other.

Within the Navy's recruiting program, recruiting districts are provided target percentages for Mental Group I-IIIA, High School Diploma Graduates, Hispanic and Black accessions [Ref. 26.]. In much the same manner, through existing enlistment standards, minority goals and quality-mix targets, the Coast Guard's recruiting program could achieve each of the four objectives simultaneously. An approach to these objectives that seeks first to achieve a 20% minority representation within the Coast Guard prior to addressing quality is an approach that will produce a medicore Coast Guard manpower force. The objectives must be pursued concurrently.

This is not to say that the minority objectives can be accomplished easily however, as they cannot. Fortunately, the literature does provide insights to the ivelopment of a

minority recruiting strategy. As in any recruiting strategy, you get what you ask for.

Due to the historical differential in AFQT scores for minorities versus whites, the element of territorial quality potential is a critical element in the recruitment of qualified minorities. As is the case in the general recruiting program however, the program seeks to recruit proportionately more minorities from the South Atlantic/South Central region. Given the quality potential of that region, is the experience of poor quality surprising?

Research into recruiter effectiveness indicates that minority recruiters are more successful in the recruiting of minorities that are white recruiters. Combining this observation with the existing territorial potentials, research would suggest the assignment of minority recruiters to the First, Third, Eleventh, Twelfth and Thirteenth districts. In practice, the First district has one minority recruiter and the Thirteenth none. Yet 50% of the minority recruiters are assigned to the Fifth, Seventh and Eighth districts.

The difficulties experienced with the effective recruiting of minorites are similar to those experienced program-wide (i.e. goal setting, goal specificity, territorial potential, reward-recognoition, etc.) and the remedies are the same. The avenues leading to the enhancement of recruiting effectiveness will similarly lead to the enhancement of minority goal accomplishment.

VI. RECOMMENDATIONS

In making these recommendations, it is clearly understood that there are no simple, one step answers to the enhancement of recruiting effectiveness. Rather the attempt will be quite complex when considering the individual and combined impact of the recruiting environment, external economic factors, and internal organizational demands. The presentation of these qualitative effectiveness issues provides an identification of the independent alternative courses of action. The most crucial decision is not so much which to consider first, but to consider any of them at all. While obviously each recommendation cannot be initiated simultaneously, some initial action can and must be taken.

A. OFFICE OF PERSONNEL (G-P)

- 1. Review the current manpower planning process and the degree to which the quality dimension is included. Provide guidance to G-PE and G-PER as to the appropriate balance between quality and quantity.
- 2. Revise the performance expectations and performance measures applicable to the recruiting division to include measures reflecting the qualitative dimension of performance (education attainment, mental aptitude distribution and a quality/quantity, net production composite).
- 3. In recognition of their shared responsibility, include in the performance measures of the Recruiting Division, Training and Education Division, and to the extent possible, Operational Medicine Division an evaluation of the recruit attrition rate.

4. With the increasing quality demands being confronted by the Recruiting Division, recognize the requirement for greater support in the form of budget dollars and increased personnel strength.

B. RECRUITING DIVISION (G-PHR)

- 1. The mission of the Coast Guard's recruiting program should be refined to read in part, "The basic objective of the Coast Guard military recruiting program is to recruit qualified officers, cadet, officer candidates and enlisted personnel in sufficient numbers and of sufficient quality to meet Regular and Reserve service needs."
- 2. Consider an addition to Chapter Three of the Recruiting Manual to provide the recruiter with the characteristics of a "best-qualified" applicant as well as the minimally qualified.
- 3. Consider a change to Chapter Seven of the Recruiting Manual to more specifically address the considerations expected in the application of "selective recruiting" and their relationship to the quality objectives.
- 4. Redesign the format of the Monthly Report of Recruiting Activities (CG-2957) to include the following qualitative performance measures (reportable by recruiting office): Number of High School Diploma Graduates; Number of GED recruits; Number of recruits in the following AFQT ranges (40 50) (51 65) (66 99); Number of recruits discharged from recruit training. These measures should subsequently be included in the annual Recapitulation of Regular Recruiting Activities.
- 5. Review available territorial potential data to determine the quality potential of each recruiting district, facilitating the assignment of enlistment quota with a quality-mix ratio or quality target.

6. Upon determination of each district's relative quality potential, and in light of the program's qualitative objectives, review the apportionament of recruiter billets and the assignment of minority recruiters. Consider a shifting of recruiter resources from the South Atlantic/South Central to the Pacific/Mountain regions.

- 7. Develop a Recruiting District-of-the-Year recognition program that will model for the districts an organizational sense of priorities reflective of the concern for quality, quantity and superior recruiting performance.
- 8. Incorporate into the Recruiting School curriculum a training segment specifically oriented to the presentation of qualitative and quantitative objectives, quality identification and the resultant performance measures.
- 9. In conjunction with the above recommendations, conduct a quality demand/ quality identification/quality awareness training program for current recruiters to debunk old myths and foster an allignment of individual and organizational goals.

C. G-PE

- 1. Review the current manpower planning process to incorporate the explicit inclusion of the qualitative dimension. As recruiting targets are prepared, provide the Recruiting Division with a recommended quality-mix reflective of actual Coast Guard manpower needs.
- 2. Working with the Recruiting Division, review the recruiter assignment process and billet distribution to insure the most effective utilization of resources in achieving quality and quantity objectives.

D. G-PMR, G-PTB, G-KOM

1. Recognizing the shared responsibility for recruit attrition, form a joint panel to review its causes and formulate recommendations for changes in policies or procedures for its reduction to an acceptable level.

E. POSTSCRIPT

From the begining, the purpose of this thesis has not been to highlight the weaknesses of the recruiting program, rather it has been to identify the difficult challenges that it faces and to recommend viable alternatives for addressing those challenges. The thesis indicates the presence of considerable strength in the recruiting program, a strength from which the recommendations can be implemented. In most cases, the recommendations do not point to new ideas as they generally represent the actual desires and intent of the recruiting program. Perhaps the simple message of the thesis is that you get what you ask for, regardless of your desires or intentions. The key lies in the proper asking.

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